2571

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

EDITED BY

DR. G. CARMICHAEL LOW.

VOLUME LIV.

SESSION 1933–1934.

LONDON:

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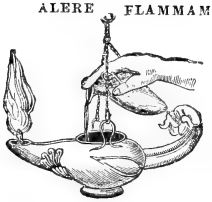

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RED LION COURT, FLEET STREET.

PREFACE.

THE number of attendances during the past Session of the Club has again been well maintained, 371 members, 31 members of the B. O. U., and 137 guests having been present, a total of 539.

Mr. David Bannerman, the Chairman, gave his annual address at the November meeting of the Club, first dealing with matters of general ornithological interest which had occurred during the year and then touching upon the question of aviculture, literature, books, and the gift of Mr. H. F. Witherby of his collection of birds to the British Museum.

Amongst the communications given during the Session may be mentioned a paper on the "Meaning of Animal Colour and Adornment," by Major R. W. G. Hingston; a short account of a trip to Shetland and the Orkneys, by Dr. G. Carmichael Low; an account, illustrated by lantern-slides, of an ornithological trip to Ireland, by Mr. B. W. Tucker; an account of the bird observatory at Heligoland and its work, also illustrated by lantern-slides, by Mr. W. B. Alexander; a paper on the "Sea-birds of West Spitsbergen—their food supply," by Mr. C. H. Hartley; and a paper on "The Birds of Abyssinia," by Major R. E. Cheesman.

New forms were described by Dr. C. B. Ticehurst, Col. R. Meinertzhagen, Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed, Mr. E. C. Stuart Baker, Mr. G. M. Mathews, Dr. Finn Salomonsen, Mr. D. A. Bannerman, Mr. N. B. Kinnear, Mr. T. H. Harrisson and Mr. C. H. Hartley, and Mr. J. Vincent.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed contributed further notes upon the status, races, distribution,

and type-localities of various African birds, and Col. R. Meinertzhagen made some remarks upon autumn migration at Ushant.

Mr. D. A. Bannerman exhibited birds new to the fauna of Nigeria; Mr. N. B. Kinnear the skin of a Blue-winged Abyssinian Goose; Dr. P. R. Lowe specimens of the Hottentot Teal from Nigeria, and a hybrid between a Black Grouse and Pheasant; and Dr. G. Carmichael Low a series of skins of the Ringed Plover from the Orkney Islands.

The Annual Dinner, held in conjunction with the British Ornithologists' Union, took place this year at the Rembrandt Hotel, Thurloe Place, S.W. 7, and was, as usual, very well attended, 159 members of the Club and Union, with their friends, being present, a record number for this dinner. Dr. P. A. Buxton showed a series of slides of ornithological interest from Nigeria; Mr. Ian Thomson slides illustrative of bird-life in Shetland and Holland; Mr. T. A. Glover a film of wild life in Africa; Mr. D. Seth-Smith a film of the Humming-Birds in the Zoological Gardens; and Mr. F. S. Chapman one of views of Greenland.

The Club entertained as distinguished guests during the Session Capt. G. C. Shortridge, Mr. C. H. Hartley, Major R. W. G. Hingston, Mr. K. J. Paludan, Mr. F. S. Chapman, and Mr. and Mrs. T. A. Glover.

G. CARMICHAEL LOW,
Editor.

London, July 1934.

BRITISH ORNITHOLOGISTS' CLUB.

(Founded October 5, 1892.)

TITLE AND OBJECTS.

The objects of the Club, which shall be called the "British Ornithologists' Club," are the promotion of social intercourse between Members of the British Ornithologists' Union and to facilitate the publication of scientific information connected with ornithology.

RULES.

(*As amended, October* 8, 1930.)

Management.

I. The affairs of the Club shall be managed by a Committee, to consist of a Chairman, who shall be elected for three years, at the end of which period he shall not be eligible for re-election for the next term; a Vice-Chairman, who shall serve for one year, and who shall not be eligible for the next year; an Editor of the 'Bulletin,' who shall be elected for five years, at the end of which period he shall not be eligible for re-election for the next term; a Secretary and Treasurer, who shall be elected for a term of one year, but shall be eligible for re-election. There shall be in addition four other Members, the senior of whom shall retire each year, and another Member be elected in his place; every third year the two senior Members shall retire and two other Members be elected in their place. Officers and Members of the Committee shall be elected by the Members of the Club at a General Meeting, and the names of such Officers and Members of Committee nominated by the Committee for the ensuing year, shall be circulated with the notice convening the General Meeting, at least two weeks before the Meeting. Should any Member wish to propose another candidate, the nomination of such, signed by at least two Members, must reach the Secretary at least one clear week before the Annual General Meeting.

II. Any Member desiring to make a complaint of the manner in which the affairs of the Club are conducted, must communicate in writing with the Chairman, who will, if he deem fit, call a Committee Meeting to deal with the matter.

III. If the conduct of any Member shall be deemed by the Committee to be prejudicial to the interests of the Club, he may be requested by the Committee to withdraw from the Club. In the case of refusal, his name may be removed from the list of Members at a General Meeting, provided that, in the notice calling the Meeting, intimation of the proposed resolution to remove his name shall have been given, and that a majority of the Members voting at such Meeting record their votes for his removal.

A Member whose name has been removed shall forfeit all privileges of Membership and shall have no claim on the Club from the date of his removal.

Subscriptions.

IV. Any Member of the British Ornithologists' Union may become a Member of the Club on payment to the Treasurer of an entrance-fee of one pound and a subscription of one guinea for the current Session. On Membership of the Union ceasing, Membership of the Club also ceases.

Any Member who has not paid his subscription before the last Meeting of the Session, shall cease, *ipso facto*, to be a Member of the Club, but may be reinstated on payment of arrears.

Any Member who has resigned less than five years ago may be reinstated without payment of another Entrance Fee.

Any Member who resigns his Membership on going abroad may be readmitted without payment of a further Entrance Fee at the Committee's discretion.

Meetings.

V. The Club will meet, as a rule, on the second Wednesday in every month, from October to June inclusive, at such hour and place as may be arranged by the Committee, but should such Wednesday happen to be Ash Wednesday, the Meeting will take place on the Wednesday following. At these Meetings papers upon ornithological subjects will be read, specimens exhibited and described, and discussion invited.

VI. A General Meeting of the Club shall be held on the day of the October Meeting of each Session and the Treasurer shall present thereat the Balance-sheet and Report; and the election of Officers and Committee, in so far as their election is required, shall be held at such Meeting.

VII. A Special General Meeting may be called at the instance of the Committee, for any purpose which they deem to be of sufficient importance, or at the instance of not fewer than fifteen Members. Notice of not less than two weeks shall be given of every General and Special General Meeting.

Introduction of Visitors.

VIII. Members may introduce visitors at any ordinary Meeting of the Club, but the same guest shall not be eligible to attend on more than three occasions during the Session. No former Member, who has been removed for non-payment of subscription, or for any other cause, shall be allowed to attend as a guest.

'Bulletin' of the Club.

IX. An Abstract of the Proceedings of the Club shall be printed as soon as possible after each Meeting, under the title of the 'Bulletin of the British Ornithologists' Club' and shall be distributed gratis to every Member who has paid his subscription.

Contributors are entitled to six free copies of the 'Bulletin,' but if they desire to exercise this privilege, they must give notice to the Editor when their manuscript is handed in. Members purchasing extra copies of the 'Bulletin' are entitled to a rebate of 25 per cent. on the published price, but not more than two copies can be sold to any Member unless ordered before printing.

Descriptions of new species may be published in the 'Bulletin,' although such were not communicated at the Meeting of the Club. This shall be done at the discretion of the Editor and so long as the publication of the 'Bulletin' is not unduly delayed thereby.

Any person speaking at a Meeting of the Club shall be allowed subsequently—subject to the discretion of the Editor—to amplify his remarks in the 'Bulletin,' but no fresh matter shall be incorporated with such remarks.

X. No communication, the whole or any important part of which has already been published elsewhere, shall be eligible for publication in the 'Bulletin,' except at the discretion of the Editor; and no communication made to the Club may be subsequently published elsewhere without the written sanction of the Editor.

Alteration and Repeal of Rules.

XI. Any suggested alteration or repeal of a standing rule shall be submitted to Members to be voted upon at a General Meeting convened for that purpose.

COMMITTEE, 1933–1934.

D. A. Bannerman, *Chairman*. Elected 1932.
G. M. Mathews, *Vice-Chairman*. Elected 1933.
Dr. G. Carmichael Low, *Editor*. Elected 1930.
C. W. Mackworth-Praed, *Hon. Secretary and Treasurer*. Elected 1929.
Rev. J. R. Hale. Elected 1931.
H. Whistler. Elected 1932.
A. Ezra. Elected 1933.
Dr. J. M. Harrison. Elected 1933.

Officers of the British Ornithologists' Club, Past and Present.

Chairmen.

P. L. Sclater, F.R.S.	1892–1913.
Lord Rothschild, F.R.S.	1913–1918.
W. L. Sclater.	1918–1924.
H. F. Witherby.	1924–1927.
Dr. P. R. Lowe.	1927–1930.
Major S. S. Flower.	1930–1932.
D. A. Bannerman.	1932–

Vice-Chairmen.

Lord Rothschild, F.R.S.	1930–1931.
W. L. Sclater.	1931–1932.
H. F. Witherby.	1932–1933.
G. M. Mathews.	1933–1934.

Editors.

R. Bowdler Sharpe.	1892–1904.
W. R. Ogilvie-Grant.	1904–1914.
D. A. Bannerman.	1914–1915.
D. Seth-Smith.	1915–1920.
Dr. P. R. Lowe.	1920–1925.
N. B. Kinnear.	1925–1930.
Dr. G. Carmichael Low.	1930–

Honorary Secretaries and Treasurers.

Howard Saunders.	1892–1899.
W. E. de Winton.	1899–1904.
H. F. Witherby.	1904–1914.
Dr. P. R. Lowe.	1914–1915.
C. G. Talbot-Ponsonby.	1915–1918.
D. A. Bannerman.	1918–1919.
Dr. Philip Gosse.	1919–1920.
J. L. Bonhote.	1920–1922.
C. W. Mackworth-Praed.	1922–1923.
Dr. G. Carmichael Low.	1923–1929.
C. W. Mackworth-Praed.	1929–

LIST OF MEMBERS.

JUNE 1934.

Acland, Miss C. M.; Walwood, Banstead, Surrey.

Acworth, Capt. Bernard, D.S.O., R.N.; 12 Tudor Street, E.C. 2.

Adie, W. J., M.D., F.R.C.P.; 86 Brook Street, W.1.

Alexander, H. G.; 144 Oak Tree Lane, Selly Oak, Birmingham.

Alexander, W. B.; Dept. of Zoology, University Museum, Oxford.

Aplin, Oliver Vernon; Stonehill House, Bloxham, Banbury, Oxon.

Ascherson, C. S.; 15 Phillimore Gardens, Kensington, W. 8.

Aylmer, Commdr. E. A., R.N.; Wyke Oliver, Preston, Dorset.

Baker, E. C. Stuart, C.I.E., O.B.E., F.Z.S., F.L.S., H.F.A.O.U.; 6 Harold Road, Upper Norwood, S.E. 19.

Bannerman, David A., M.B.E., B.A., F.R.S.E. (*Chairman*); British Museum (Natural History), S.W. 7; and 7 Pembroke Gardens, Kensington, W. 8.

Barclay-Smith, Miss P.; Park Lodge, Hervey Road, Blackheath, S.E. 3.

Barrington, Frederick J. F., M.S., F.R.C.S.; University College Hospital Medical School, Gower Street, W.C. 1.

Bates, G. L.; Blasford Hill, Little Waltham, Chelmsford.

Best, Miss M. G. S.; Broadwater, Amport, Andover, Hants.

Betham, Brigadier-General R. M., C.I.E.; c/o The National Provincial and Union Bank of England, 208–209 Piccadilly, W.1.

Blaauw, F. E., C.M.Z.S.; Gooilust, s'Graveland, Hilversum, North Holland.

Blaker, George B.; Gaveston Place, Nuthurst, Horsham, Sussex.

Blezard, Miss Ruth; Stocks, Tring, Herts.

Boorman, S.; Heath Farm, Send, Woking, Surrey.

Booth, H. B.; "Ryhill," Ben Rhydding, Yorks.

Boyd, A. W.; Frandley House, near Northwich.

Bradford, A. D.; Garston House, near Watford.

Bradford, Sir J. Rose, K.C.M.G., M.D., F.R.C.P., F.R.S.; 8 Manchester Square, W. 1.

Brown, George; Combe Manor, Hungerford, Berks.

Browne, Patrick R. E.; Firwood, Trumpington Road, Cambridge.

Bunyard, P. F., F.Z.S.; 57 Kidderminster Road, Croydon.
Bureau, Dr. L.; 15 rue Gresset, Nantes, France.
Butler, Arthur L.; St. Leonard's Park, Horsham, Sussex.
Buxton, Anthony; Horsey Hall, Gt. Yarmouth, Norfolk.
Campbell, James; Layer Marney Hall, Kelvedon, Essex.
Chapman, F. M.; American Museum of Natural History, New York, U.S.A.
Charles, Mrs. Edith S.; Woodside House, Chenies, Bucks.
Charteris, Hon. G. L.; 24 Oxford Square, W. 2.
Chasen, Frederick N.; Raffles Museum, Singapore.
Cheesman, Major R. E., O.B.E.; Tilsden, Cranbrook, Kent.
Clarke, Brig.-General Goland van Holt, C.M.G., D.S.O. F.Z.S. Wiston Park, Steyning, Sussex.
Clarke, John P. Stephenson; Broadhurst Manor, Horsted Keynes, Sussex.
Clarke, Col. Stephenson Robert, C.B., F.Z.S.; Borde Hill, Cuckfield, Sussex.
Cleave, Henry P. O.; Mansfield House, Kendrick Road, Reading.
Cochrane, Captain Henry L., R.N. (Retd.); The Chase, Whaddon, Bletchley, Bucks.
Collier, Charles, F.Z.S.; Bridge House, Culmstock, Devon.
Conover, H. B.; 6 Scott Street, Chicago, Illinois, U.S.A.
Cox, Major-Gen. Sir Percy Z., G.C.I.E., G.C.M.G., K.C.S.I.; 25 Kensington Palace Mansions, Kensington, W. 8.
Cunningham, Josias; Drinagh, Kensington Road, Knock, Belfast.
Curtis, Frederick, F.R.C.S.; Alton House, Redhill, Surrey.
Daniels, Christopher; 75 Grosvenor Street, W. 1.
Deane, Robert H.; Seaford Head Golf Club, Seaford, Sussex.
Delacour, Jean; Château de Clères, Clères, Seine-Inférieure, France.
Delmé-Radcliffe, Lieut.-Col. A., D.S.O.; Cypress Lodge, Bridge Street, Walton-on-Thames, Surrey.
Dewhurst, Captain F. W., Royal Marine L.I.; Elmwood, North End, Hampstead, N.W. 3.
Dobie, William Henry, M.R.C.S.; 2 Hunter Street, Chester.
Duncan, Arthur Bryce; Gilchristlands, Closeburn, Dumfriesshire.
Ellis, Ralph, Jr.; 2420 Ridge Road, Berkeley, California.
Ezra, A., O.B.E., F.Z.S. (*Committee*); Foxwarren Park, Cobham, Surrey.
Ferrier, Miss Judith M.; Hemsby Hall, Hemsby, Norfolk.
Fisher, Kenneth; School House, Oundle, Northamptonshire.

Flower, Major S. S. (*Chairman*, 1930–1932); Spencersgreen End, Tring, Herts.

Foulkes-Roberts, Captain P. R.; Kwale, Warri Province, Nigeria, West Africa, and Westwood, Goring-on-Thames, Oxfordshire.

Gilbert, H. A.; Bishopstone, near Hereford.

Glegg, W. E.; The House, Albion Brewery, Whitechapel Road, E.1.

Glenister, A. G.; The Barn House, East Blatchington, Seaford.

Godman, Miss Eva; South Lodge, Horsham, Sussex.

Gosnell, H. T.; The Boreen, Headley Down, Bordon, Hants.

Grant, Captain C. H. B., F.Z.S.; 58 *a* Ennismore Gardens, S.W.7.

Gyldenstolpe, Count Nils; Royal (Natural History) Museum, Stockholm, Sweden.

Hachisuka, The Marquess; Mita Shiba, Tokyo, Japan.

Haigh, George Henry Caton, F.Z.S.; Grainsby Hall, Great Grimsby, Lincolnshire.

Hale, Rev. James R., M.A. (*Committee*); Boxley Vicarage, Maidstone, Kent.

Hamerton, Colonel A. E.; 1 Park Village West, Regent's Park, N.W. 1.

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Hollom, P. A. D.; Birchfield, Addlestone, Weybridge, Surrey.

Hope, R. F.; Herons Ghyll, Uckfield, Sussex.

Hopkinson, Emilius, C.M.G., D.S.O., M.B., F.Z.S.; Wynstay, Balcombe, Sussex.

Hordern, Miss Doreen; Babworth House, Darling Point, Sydney, N.S.W., Australia.

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Inglis, C. McFarlane; Natural History Museum, Darjiling, India.

Ingram, Capt. Collingwood; The Grange, Benenden, Cranbrook, Kent.

Jabouille, Pierre; Château de Clères, Clères, Seine-Inférieure, France.

Jordan, Dr. Karl; Zoological Museum, Tring, Herts.

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McNeile, J. H.; Nonsuch, Bromham, Chippenham, Wilts.

Magrath, Lieut.-Colonel H. A. F.; 43 Millbank, Westminster, S.W. 1.

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Mathews, G. M., F.L.S., F.Z.S. (*Vice-Chairman*); Meadway, St. Cross, Winchester, Hants.

Mavrogordato, J. G.; Mariners, Westerham, Kent.

May, W. Norman, M.D.; The White House, Sonning, Berks.

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Micholls, Mrs. Dorothy; Silver Birches, Wentworth, Virginia Water.

Momiyama, Toku Taro; 1146 Sasazka, Yoyohata-mati, Tokyo, Japan.

Munn, P. W.; Puerto Alcudia, Majorca, Balearic Isles, Spain.

Murton, Mrs. C. D.; Cranbrook Lodge, Cranbrook, Kent.

Musselwhite, D. W.; 59 Mayford Road, Wandsworth Common, S.W. 12.

Musters, James Lawrence Chaworth; Royal Societies Club, St. James's Street, S.W. 1.

Naumburg, Mrs. W. W.; 121 East 64th Street, New York.

Newman, T. H., F.Z.S.; Verulam, 46 Forty Avenue, Wembley Park, Middlesex.

Nicholson, E. M.; 61 Marsham Street, S.W. 1.

Oldham, Chas., F.Z.S.; The Bollin, Shrublands Road, Berkhamsted, Herts.

Osmaston, Bertram Beresford; 116 Banbury Road, Oxford.

Paulson, C. W. G.; 10 King's Bench Walk, Temple, E.C. 4.

Pease, H. J. R.; Medmenham, Marlow, Bucks.

Pershouse, Major S.; c/o Lloyds Bank (Cox & King's Branch), 6 Pall Mall, S.W. 1.

Pitman, Capt. C. R. S., D.S.O., M.C.; Entebbe, Uganda.

Player, W. J. P.; Wernfadog, Clydach R.S.O., Glamorganshire.

Popham, Hugh Leyborne, M.A.; Hunstrete House, Pensford, Somerset.

Rhodes, Miss G. M.; Hildersham Hall, Cambridge.

Rickett, C. B., F.Z.S.; 27 Kendrick Road, Reading, Berks.

Rivière, B. B., F.R.C.S.; The Old Hall, Woodbastwick, Norfolk.

Rothschild, Lionel Walter—Lord, D.Sc., F.R.S., Ph.D., F.Z.S. (*Chairman*, 1913–1918); Tring Park, Herts.

Sandeman, R. G. C. C.; Dan-y-parc, Crickhowell, Brecon.

Schauensee, R. M. de; Devon, Pennsylvania, U.S.A.

Sclater, William Lutley, M.A., F.Z.S. (*Chairman*, 1918–1924); 10 Sloane Court, S.W. 1.

Scone, The Rt. Hon. Mungo David—Lord; Scone Palace, Perth.

Seth-Smith, David, F.Z.S.; Curator's House, Zoological Gardens, Regent's Park, N.W. 8.

Shipton, Wm., B.A., M.D.; 2 The Square, Buxton.

Simonds, Major Maurice H., Fines Baylewick, Binfield, Berks.

Sladen, Major A. G. L., M.C.; Horsenden Manor, Princes Risborough, Bucks.

Sparrow, Col. R., C.M.G., D.S.O., F.Z.S., F.R.G.S.; The Lodge, Colne Engaine, Earls Colne, Essex.

Stares, J. W. C.; Portchester, Hants.

Stevens, Herbert; Clovelly, Beaconsfield Road, Tring, Herts.

Stoneham, Lt.-Col. H. F., O.B.E., F.E.S.; Kitale Estates, Kenya Colony, British East Africa.

Stuart-Menteth, W. G.; Bransfield, Godstone, Surrey.

Styan, F. W., F.Z.S.; Stone Street, near Sevenoaks.

Swynnerton, C. F. Massy; Poste Restante, Dar-es-Salaam, Tanganyika Territory, East Africa.

Taka-Tsukasa, Prince Nobusuke; 1732 Sanchome, Kami-meguro, Meguro-Ku, Tokyo, Japan.

Talbot-Ponsonby, C. G.; 5 Crown Office Row, Temple, E.C. 4.

Taylor, Miss D. L.; Bellefields, Englefield Green, Surrey.

Tavistock, Hastings William Sackville, Marquess of, F.Z.S.; The Place House, Peasmarsh, Rye, Sussex.

Thomson, A. Landsborough, O.B.E., D.Sc.; 16 Tregunter Road, S.W. 10.

Thorpe, W. H., M.A., Ph.D.; Jesus College, Cambridge.

Ticehurst, Claud B., M.A., M.R.C.S.; Saxon House, Appledore, Kent.

Ticehurst, N. F., O.B.E., M.A., M.B., F.R.C.S., F.Z.S.; 24 Pevensey Road, St. Leonards-on-Sea.

Tucker, B. W., B.A., F.Z.S.; 9 Marston Ferry Road, Oxford.

Turner, Miss E. L., F.Z.S.; The Half Way Cottage, 13 Storey's Way, Cambridge.

Turtle, Lancelot J.; 17–21 Castle Place, Belfast.

Tyrwhitt-Drake, Hugh G., F.Z.S.; Cobtree Manor, Sandling, Maidstone.

Urquhart, Capt. Alastair, D.S.O., Latimer Cottage, Latimer, Chesham, Bucks.

van Someren, Dr. V. G. L.; East Africa and Uganda Natural History Society, Coryndon Memorial Museum, Nairobi, Kenya Colony, East Africa.

Vernay, A. S.; 51 Berkeley Square, W. 1.

Vincent, J.; c/o The Bird Room, British Museum (Natural History), South Kensington, S.W. 7.

Wade, Major G. A., M.C.; St. Quintin, Sandy Lane, Newcastle-u.-Lyme, Staffs.

Waite, Herbert William; c/o Messrs. Grindlay & Co., Ltd., Bombay.

Wallis, H. M.; 110 Kendrick Road, Reading.

Ware, R.; Leafwood, Frant, Tunbridge Wells.

Watt, Mrs. H. W. B.; 90 Parliament Hill Mansions, Lissenden Gardens, N.W. 5.

Whistler, Hugh, F.Z.S., F.L.S. (*Committee*); Caldbec House, Battle, Sussex.

Whitaker, Joseph I. S., F.Z.S.; Malfitano, Palermo, Sicily.

White, S. J., F.Z.S.; 17 Philpot Lane, E.C. 3

Whitley, H.; Primley, Paignton, S. Devon.

Williams, Victor Owen; 6 Crown Office Row, Temple, E.C. 4.

Williamson, Sir W. J. F., C.M.G., F.Z.S.; c/o Lloyds Bank, 6 Pall Mall, S.W. 1.

Willoughby-Ellis, H., F.Z.S.; Woodlands, Old Hill, Chislehurst, Kent.

Wing, J. Sladen; 21 Cheyne Gardens, Chelsea Embankment, S.W. 3.

Wishart, E. E.; Marsh Farm, Binsted, Arundel, Sussex.

Witherby, Harry F., M.B.E., F.Z.S. (*Chairman*, 1924–1927); 12 Chesterford Gardens, Hampstead, N.W. 3.

Witherington, G.; Sumner Plat, Hayward's Heath.

Wood, Casey A., M.D.; c/o The Library of Ornithology, McGill University, Montreal, Canada.

Workman, William Hughes, F.Z.S.; Lismore, Windsor Avenue, Belfast.

Worms, Charles de; Milton Park, Egham, Surrey.

Total number of Members 179

NOTICE.

[Members are specially requested to keep the Hon. Secretary informed of any changes in their addresses, and those residing abroad should give early notification of coming home on leave.]

LIST OF AUTHORS

AND OTHER PERSONS REFERRED TO.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXI.

THE three-hundred-and-sixty-sixth Meeting of the Club was held at the Knightsbridge Hotel, Knightsbridge, S.W. 1, on Wednesday, October 11, 1933.

Chairman : Mr. D. A. BANNERMAN.

Members present:—Miss C. M. ACLAND ; W. B. ALEXANDER ; C. S. ASCHERSON ; E. C. STUART BAKER ; Miss P. BARCLAY-SMITH ; F. J. F. BARRINGTON ; G. E. BROWN ; P. F. BUNYARD ; Mrs. E. S. CHARLES ; Hon. G. L. CHARTERIS ; H. P. O. CLEAVE ; J. CUNNINGHAM ; A. EZRA ; Miss J. M. FERRIER ; Miss E. M. GODMAN ; G. H. GURNEY ; Col. A. E. HAMERTON ; Dr. J. M. HARRISON ; R. E. HEATH ; Mrs. T. E. HODGKIN ; Dr. E. HOPKINSON ; Rev. F. C. R. JOURDAIN ; N. B. KINNEAR ; Miss E. P. LEACH ; Dr. G. CARMICHAEL LOW (*Editor*) ; Dr. P. R. LOWE ; Dr. N. S. LUCAS ; T. H. MCKITTRICK, jun. ; C. W. MACKWORTH-PRAED (*Hon. Sec. & Treasurer*) ; Lt.-Col. H. A. F. MAGRATH ; Dr. P. H. MANSON-BAHR ; J. G. MAVROGORDATO ; Dr. W. NORMAN MAY ; E. G. B. MEADE-WALDO ; Col. R. MEINERTZHAGEN ; T. H. NEWMAN ; C. OLDHAM ; H. LEYBORNE POPHAM ; C. B. RICKETT ; W. L. SCLATER ; D. SETH-SMITH ; Col. R. SPARROW ; Dr. A. LANDSBOROUGH THOMSON ; B. W. TUCKER ; Miss E. L. TURNER ; Capt. A. URQUHART ; H. M. WALLIS ; H. WHISTLER ; J. SLADEN WING ; H. F. WITHERBY ; W. H. WORKMAN ; C. G. M. DE WORMS.

Members of the B. O. U. :—Dr. H. B. Elton ; R. M. Garnett ; P. A. D. Hollom ; Lt.-Col. R. F. Meiklejohn ; R. E. Moreau ; Col. W. H. Payn.

Guest of the Club :—Captain G. C. Shortridge.

Guests :—Mr. R. A. B. Ardley ; Mrs. Ascherson ; R. S. Jenyns ; Guy Morris ; Dr. F. Salomonsen ; Mrs. W. L. Sclater ; Mrs. A. Urquhart.

Annual General Meeting.

This was held at the Knightsbridge Hotel, Knightsbridge, S.W. 1, immediately preceding the Dinner. Mr. D. A. Bannerman took the Chair, and twenty-eight other members of the Club were present. The minutes of the last meeting were read and confirmed.

Mr. C. W. Mackworth-Praed, the Hon. Secretary and Treasurer, presented the Financial Statement and Secretary's Report for the past Session, 1932–1933.

He said that the status of the Club was very satisfactory. He regretted to announce the deaths of Messrs. E. E. Adams, W. Shore Baily, T. G. Laidlaw, and Thomas Parkin. He further regretted to announce the death of Lord Grey, who was for many years a member of the Club, and who resigned his membership only last year. There had been also five resignations. During the Session fifteen new Members had joined the Club.

Statistics for attendance at Meetings showed a total of 525, a slight drop from the previous year, but under existing circumstances quite satisfactory.

Turning to finance, the noteworthy features were, firstly, a considerable increase in printing expenses. The 'Bulletin' was larger last year than for very many years. As, however, the 'Bulletin' must be looked on as the measure of the Club's usefulness towards ornithological science outside its own Members, this could only be regarded as a cause for congratulation ; secondly, the Club had this year renewed its support towards the 'Zoological Record' to the extent of

£10 10*s.*; and thirdly, it had made a donation of £25 towards the British Trust for Ornithology.

This coming year the Club would probably have some considerable expenses in connection with the International Ornithological Congress, to be held in this country. The membership was, however, on the increase, and the deposit account was satisfactory and was put aside to some extent for this very purpose, so he (the Hon. Secretary) did not think the Club would need to reduce its ordinary expenditure in any way. On the contrary, he looked forward to an enlarged membership and a considerable increase in its activities.

The Report was carried unanimously.

Mr. G. M. Mathews was elected Vice-Chairman of the Club in place of Mr. H. F. Witherby, whose period of office had terminated.

Mr. C. W. Mackworth-Praed was re-elected Hon. Secretary and Treasurer.

Mr. A. Ezra and Dr. J. M. Harrison were elected Members of the Committee in place of Dr. P. H. Manson-Bahr and Dr. A. Landsborough Thomson, retiring through seniority.

This concluded the business, and those present then adjourned to the Dinner.

Committee, 1933–1934.

Mr. D. A. Bannerman, *Chairman* (elected 1932).
Mr. G. M. Mathews, *Vice-Chairman* (elected 1933).
Dr. G. Carmichael Low, *Editor* (elected 1930).
Mr. C. W. Mackworth-Praed, *Hon. Secretary and Treasurer* (elected 1929).
Rev. J. R. Hale (elected 1931).
Mr. H. Whistler (elected 1932).
Mr. A. Ezra (elected 1933).
Dr. J. M. Harrison (elected 1933).

BRITISH ORNITHOLOGISTS' CLUB.

Financial Statement for the 12 *months September* 1, 1932, *to August* 31, 1933.

12 m'ths ended Aug. 31, 1932.				£	s.	d.	£	s.	d.
			To Balance in Hand, September 1, 1932:—						
58	10	3	Cash at Bank, Current a/c	46	16	5			
731	0	1	Do. Deposit a/c	650	0	0			
4	13	4	In Hands of Treasurer ...	1	16	1			
							698	12	6
4	0	0	,, Entrance Fees of 11 New Subscribers	11	0	0			
181	13	0	,, Subscriptions—177 Members	185	17	0			
1	1	0	,, Subscription in advance.....	–	–	–			
							196	17	0
34	10	4	,, Sales of 'Bulletin'				71	18	9
20	1	9	,, Bank Interest				3	5	9
£1,035	9	9					£970	14	0

12 m'ths ended Aug 31, 1932.				£	s.	d.	£	s.	d.
			By Printing and Distribution of Publications and 'Bulletin' (nos. 362–370)				203	5	5
139	15	5							
28	2	0	,, Hire of Lanterns at Meetings				19	4	0
5	11	9	,, H. B. Usher for compiling and arranging Index to 'Bulletin' B. O. C., 1932–33.				7	7	0
14	14	7	,, Miscellaneous Expenditure, including Audit Fee, Printing, Stationery, and Postages.				19	5	11½
148	13	6	,, Printing and Publication of General Index				–	–	–
–	–	–	,, British Trust for Ornithology: Donation.....				25	0	0
–	–	–	,, Zoological Society of London: Donation to 'Zoological Record' Fund.....				10	10	0
			,, Balance in Hand, August 31, 1933:—						
46	16	5	Cash at Bank, Current a/c	31	5	1			
650	0	0	Do. Deposit a/c	653	5	9			
1	16	1	In Hands of Treasurer ...	1	10	9½			
							686	1	7½
£1,035	9	9					£970	14	0

C. W. MACKWORTH-PRAED, *Treasurer.*

We have compared the foregoing Statement with the Books and Vouchers of the British Ornithologists' Club for the year ended August 31, 1933, and certify it to be in accordance therewith. We have also verified the Cash at Bank.

23 Queen Victoria Street,
London, E.C. 4.
September 4, 1933.

W. B. KEEN & CO.,
Chartered Accountants.

Mr. David Bannerman exhibited three birds new to the fauna of Nigeria, and said :—

In the spring of this year, Dr. P. A. Buxton, who will be known to many of you for his work on desert birds and animals, went out to Nigeria to make investigations on the Tsetse-fly, and, fortunately, was quartered at Gadau, in the Azare district of Bauchi Province, a locality concerning which we previously knew little. While in residence there, from February till June, Dr. Buxton made a small collection of birds, which included some very interesting species.

You will remember that in 1928 Mr. G. L. Bates discovered a fine new Francolin at Say, in the Upper Volta, about 230 miles west of Sokoto. He shot one bird only, which was made the type of *Francolinus coqui spinetorum*. This Francolin was one of the prizes which Dr. Buxton secured at Gadau, and through his interest we have recently received another fine specimen from Dr. J. O. Paisley from Azare, in the same province.

Of even greater interest is a specimen of Savile's Pigmy Bustard, also obtained by Dr. Paisley near Azare a few months ago. This bird was discovered by Admiral Lynes in Kordofan, and named by him *Lophotis savilei*. Its appearance in Nigeria is, therefore, of great interest, extending as it does its range hundreds of miles to the west. I have also secured reliable information that it occurs in Senegal, but this requires confirmation, as the bird was eaten.

Finally, Dr. Buxton discovered the White-backed Duck (*Thalassornis leuconotus leuconotus*) on the Hago Swamp, near Hadejia, in Kano Province. His party shot nineteen, and he saw fifty on April 30. Its occurrence there came as a surprise to me, for it had never been previously recorded from north of Angola, and only once from eastern Cameroon.

I hope that when we have an evening devoted to lantern-slides Dr. Buxton will show us views of the country where these birds were secured.

Colonel R. Meinertzhagen made the following remarks upon autumn migration at Ushant :—

The island of Ushant, lying 12 miles off the west coast of

Brittany, has proved itself to be a first-class observatory for bird migration. Dr. Eagle Clarke visited it in 1898, but was only able to remain there some ten days owing to the misconstruction placed on his activities by the French authorities. Since the war, Collingwood Ingram visited the island for a short period of the autumn migration, during September, and made some valuable observations, also recording for the first time in Europe the occurrence of *Locustella fasciolata* from eastern Asia. We visited the island from September 11 to October 4, arming ourselves with a Naturalist's Permit from the French Government, a Permis de Chasse, and a letter of recommendation from the authorities to the lighthouses. We were not molested in the slightest degree, and on all sides met with courtesy and kindness. One has to be devoted to crustaceans of every description to enjoy a visit to Ushant.

Ushant Island has been well described by Eagle Clarke in vol. ii. of his ' Studies in Bird Migration,' 1912, pp. 305–328. It is, roughly, five miles by two, the longer axis running south-west and north-east. It is practically treeless, but contains small patches of scrub and a few small spinneys, sufficient, and, indeed, ideal, for sheltering migrants. Two shallow valleys running parallel into the Bay of Lampaul contain a few reed-beds and osier-beds. The rest of the island is open heath, stunted gorse, and heather, whilst at the south-west extremity is a fine stretch of short crisp grass, ideal for Wheatears, Dotterel, and suchlike birds. Wader-ground is poor, the bulk of the coast-line being granite rock, rugged and ragged. Lampaul Bay has a fair stretch of sand, and it was here that we saw the few Waders observed. We soon became well acquainted with the island, and our party of three made a rule of patrolling it thoroughly every day.

The local inhabitants and the lighthouse keepers had no bird-sense, though quite prepared to give information on the purely sporting aspect. We were, however, credibly informed that on December 27, 1927, 416 Woodcock struck the Creech Light, and many hundreds of exhausted birds were killed on the following day throughout the island. All the islanders were agreed that during the winter storms from November

to March, especially when snow has fallen on the mainland, the island is visited by thousands of birds of all sorts. Unfortunately we have no accurate information on bird migration at Ushant except during the early part of autumn passage, in fact during the periods during which Eagle Clarke, Collingwood Ingram, and ourselves visited the island. Local information we found to be quite unreliable. One quite intelligent informant, after enumerating many species seen in winter, was asked, by way of a test, "I suppose you get a few Turkeys here in hard winters ?" "Oh, yes," he replied, without a smile; "in very hard weather I have shot them, but they are rare."

During the period of our visit we kept a migration chart (now exhibited) which shows at a glance the volume of migration among sixteen of the commoner forms. What stands out from this chart is the response made by migrants to an east wind. It moved them from Ushant and caused others to arrive. Other winds had not the same effect, neither had the weather. The only influence fog, cloud, or clear weather seemed to have on passage was that in clear weather only tired birds would come down to Ushant, whilst during fog the main body would take advantage of the island.

Among the residents and summer visitors the Meadow-Pipit, Stonechat, Yellow Hammer, Wheatear, Rock-Pipit, Hedge-Sparrow, Wren, House-Sparrow, Sky-Lark, Corn-Bunting, Swallow, and Common Tern were the commonest. The Robin (continental form), Raven, Water-Rail, and Moorhen are scarce. The Kestrel is probably resident, also the Ringed Plover. Notable exceptions are the Starling, Dartford Warbler, and Chough, all so common in Brittany. The Chough was seen occasionally, but these were only parties wandering from the mainland. The Stonechat is darker even than the British form (*Saxicola torquata hibernans*), and is much nearer the Hebridean form (*S. t. theresæ*). The Hedge-Sparrow and Robin are the continental forms.

This is no place for a detailed list of migrants. I shall only mention the rarer observations. Among interesting birds we secured a Firecrest on Sept. 18 and saw another

on the 25th. A Tawny Pipit was shot on Sept. 18, a solitary bird. Dotterel were seen on September 14, 16, and 18. A specimen of the Melodious Warbler (*Hippolais polyglotta*) was obtained on Sept. 22. Pairs of Grey Phalarope were seen on Sept. 20 and 30. A few British Robins appeared on Sept. 24, and were easily recognizable on colour and by habit. Whereas the resident Ushant Robin is a skulker and confined to bush and spinneys away from habitations, the British form, on arrival, kept close to habitations, and showed no fear of man. Sedge-Warblers were common during most of our stay, and struck the Light in some numbers. The problem of the Kingfisher is interesting, for Eagle Clarke noted them as surprisingly abundant in September. We saw only a few individuals. They must certainly be migrants, and little seems to be known about the movements of this bird. Great Shearwaters were seen in August, when I spent a day at Ushant, and several were seen on Oct. 4. A single Pied Wagtail was secured on Sept. 28, though the White Wagtail was fairly common throughout our visit. Two Pratincoles were seen flying over on Sept. 29, and a few Snow-Buntings appeared on Sept. 24 and 25 in a very tired condition.

Whence do these Ushant September migrants come? It is too early for the east-to-west European passage, and I am inclined to think they all come from a northerly direction. The occurrence of Snow-Buntings and Greenland Wheatears would seem to support this view, whilst we never saw a single migrant which could for certain be said to be an east-to-west migrant. If this is correct it would then appear that the Firecrest, Melodious Warbler, and Tawny Pipit might be British breeding birds. But whence came the Pratincole?

There are two other aspects of migration which interested us. In the first place, the relation between moult and migration. We caught several individuals with primaries still in moult, and a good many in full body moult. But by far the majority of specimens handled showed no sign of moult, and had changed into winter plumage. Where moult was in progress birds were thin, otherwise they were all very fat. The other aspect of migration was stomach-contents of

birds actually on passage, that is, birds which struck the Creoch Light. These comprised ten Sedge-Warblers, three Whitethroats, a Tree-Pipit, and three Dunlins. In every case there was not a trace of food in the stomach.

The nearest portion of the English coast to Ushant is about the south coast of Cornwall and Devon, a distance of 120 miles. When birds struck the Creoch Light it was always between 1 A.M. and 3.30 A.M., which still further lends support to the view that September passage in Ushant arrives from the north.

There are two lighthouses on Ushant Island and two on rocks just off its coast. The main light is the Creoch Light, at the south-west end, with a white beam. The other land lighthouse is at the north-east end, with a red beam. This red-beam light has never been known to attract birds.

Mr. R. A. B. ARDLEY, late second officer of the 'Discovery II,' who had recently returned from the Antarctic, made some interesting remarks upon Petrels and other birds found in these southern waters.

Mr. R. E. MOREAU made some remarks on the migration routes across the Lybian Desert. A full account of this interesting paper will appear in 'The Ibis' later.

Dr. FINN SALOMONSEN read a paper entitled "Remarks on the Montane Avifauna in Central Madagascar." He said:—

The geographical aspect of Madagascar shows the whole of the western parts covered with great arid plains, and in the east a densely forested region. These two areas are divided by a mountain barrier, extending from the north to the extreme south of the island, occupying the interior parts of Madagascar. To the south we find the vast high plateau Betsileo, which is replaced in the central parts of the island by high mountains, of which Ankaratra has an altitude of 10,000 feet, and is the highest mountain in Madagascar. To the north of the Ankaratra Mountains we find only smaller chains, such as Manjaka, Tsaratanana, and others. To the west of all these mountains is situated a large high plateau, which gradually merges into the arid plains of the western lowland. The bird-life in the interior of Madagascar is rather scarce,

and only few birds are recorded from there, although some species, as, for instance, the Grass-Warbler (*Cisticola cherina*), the Wagtail (*Motacilla flaviventris*), and the Bush-Lark (*Mirafra hova*), are quite common. The mountainous part of Madagascar is especially poor in birds peculiar to it, *i. e.*, birds which occur only on the mountains and on the high plateau. Of such species only two are known, the Warbler *Dromœocercus seebohmi* Sharpe and the Rail *Sarothrura watersi* (Bartlett). Both were previously known only from the type-specimens until the great Anglo-Franco-American Expedition recently rediscovered them and collected a good series of both.

Through a careful examination of the very extensive series of Madagascar birds in the British Museum and the Museum of Natural History in Paris I succeeded in finding some other birds peculiar to the mountains. These birds are all to be regarded as geographical subspecies of well-known birds from the forests of the eastern lowland. However, as the discovery of these mountain birds was quite unexpected, and as their modification seems to show an example of an ecological rule, I thought it might be of some interest to mention them here. I am very indebted to Dr. Lowe, of the Bird Room of the Natural History Museum, through whose kindness it has been possible for me to exhibit specimens of these birds to-night.

The first of the species which I shall show you is a Fly-catcher, *Newtonia brunneicauda*. It occurs on the whole island wherever there is a growth of trees. The birds which have ascended the mountains appear to have become larger, which is easily seen by comparing the birds of the two series shown in this box. The specimens on the left belong to the small lowland form, and those on the right are specimens from the Ankaratra Mountains, showing much larger proportions. On the slip underneath the birds I have written the variation of the wing-length of both forms. In addition, the mountain form is somewhat darker than the lowland form.

The second species is a White-eye (*Zosterops maderaspatana*), which is the only species of its family in Madagascar. Like *Newtonia brunneicauda*, it inhabits the whole island, but it is

also to be found on most of the islands surrounding Madagascar, differentiated as certain island forms. This bird, in a quite analogous way to the Flycatcher (*Newtonia*), grows larger in the mountains, but, regarding the coloration, it differs only slightly from the lowland form. In another box I exhibit some specimens of this bird.

The third species is the well-known Stonechat (*Saxicola torquata*), which is distributed over nearly the whole of the Ethiopian and Palæarctic regions. Madagascar is inhabited by the subspecies *S. t. sibilla*, which is found over the whole island. This bird also becomes larger in the central high plateau, but is coloured similarly to the lowland form, as was the case with the Mountain White-eye. The two forms of the Madagascar Stonechat, of which the mountain form is very much larger than the lowland bird, are exhibited in this box.

And now for the fourth, and last, form. It belongs to a genus peculiar to Madagascar, called *Pseudocossyphus*, being, however, very closely allied to the African Rock-Thrushes (*Monticola*) and Robin-Chats (*Cossypha*). *Pseudocossyphus imerinus* is, in a number of subspecies, distributed over the whole of Madagascar, the eastern forests being inhabited by *P. i. sharpei*. The birds which are found in the Ankaratra Mountains are, on an average, paler than *sharpei*, but the main character is their larger size. I also exhibit some specimens of these birds.

Thus we find that all the mountain forms mentioned here are modified in a similar way, as they are all larger than the birds from the eastern coastal regions. In colour, however, there exist no, or at any rate very slight, differences. The differences in size are rather large, and the measurements of the respective mountain and lowland races do not overlap. The wing-measurements are as follows :—

	Lowland form.	Mountain form.
	mm.	mm.
Newtonia brunneicauda	♂♂, 52–58	♂♂, 58–62
	♀♀, 52–58	♀♀, 58–61
Zosterops maderaspatana	♂♂, 53–59	♂♂, 59–65
	♀♀, 52–59	♀♀, 61–63
Saxicola torquata.....	♂♂, 64–71	♂♂, 73–76
	♀♀, 63–69	♀♀, 73–74
Pseudocossyphus imerinus	♂♂, 75–80	♂♂, 80–87
	♀♀, 71–78	♀♀, 79–84

That the mountain forms are satisfactorily established is proved through the fact that about 600 specimens of the four species mentioned have been examined and measured. The analogous way in which these birds have been differentiated, when moving from the lowland up the slopes of the mountains, makes it possible that the larger size is due to climatic changes, and I suppose it is a reaction against lower temperature at the higher altitudes. It is a well-known fact that birds grow larger in colder climates, and we find the same all over the world. For instance, you all know that many birds breeding in northern or polar regions migrating south to England are larger than the English breeding-birds. I would recall to your minds the Redpoll, the Wheatear, the Dunlin, and the Redshank, and some others. I consider the large mountain forms in Madagascar as having developed in accordance with this principle.

A more detailed report on these birds will be published at some future date.

Lt.-Col. R. F. Meiklejohn showed six clutches of eggs of Rüppell's Warbler (*Sylvia ruppelli*) from Crete :—

c/5, Crete, 7. v. 1933.
c/5, ,, 9. v. 1933.
c/4, ,, 12. v. 1933.
c/2, c/1 (addled) } Crete, 13. v. 1933.

Mr. P. F. Bunyard exhibited an interesting series of eggs from the Alberta muskegs collected by Professor Rowan :—

Eight clutches of three each of Bonaparte's Gull (*Larus philadelphia*) ; a clutch of four eggs of the Red-breasted Snipe (*Limnodromus griseus hendersoni* Rowan) ; clutches of three and two of the Greater Yellowshank (*Tringa melanoleuca*) ; clutches of four and three of the Yellowshank (*Tringa flavipes*), and made the following remarks :—

On April 14, 1926, I exhibited two clutches of three eggs each of Bonaparte's Gull, the first to reach this country since the time of McFarlane (Bull. B. O. C. xlvi. 1926, pp. 108–110). A further exhibit of a third clutch was made on October 8, 1930

(Bull. B. O. C. li. 1930, pp. 11–12). I re-exhibit the foregoing with the five additional clutches recently received from Prof. Rowan, making a unique series of eight clutches.

The recently acquired material does not necessitate any alteration in my original comparative study—the distinguishing characteristics are amply confirmed, especially in regard to their shape, constancy in ground-colour, and the evenness of the distribution of their markings.

In clutch B there is a very small egg, which I have left out of the averages, measuring 42×31·5 mm., and weighing only 1·352 mg. Clutch D has one egg with an exceptionally large mark for this species, measuring 19×17 mm.

Measurements and *weights* of 26 eggs (including three in the Massey collection) average as follows :—49·1×35·2 mm., 1·650 mg. The eggs showing the four extremes measure **45·4**×34·4, **53·2**×**34**, 49×**36·5**. Maximum weight 1·828 mg.; minimum weight 1·451 mg.

Two of the above clutches were collected by A. D. Henderson.

Bent (number of eggs not stated) gives as the average 49·5×34·9 mm.

The clutch of four eggs of the Red-breasted Snipe (or Dowitcher) was taken by Prof. Rowan at Fawcett, Alberta, on June 6, 1931. The ♀ was collected off the nest, which was situated on the edge of an enormous muskeg flanked by tall spruce, and was composed of grasses placed in a small clump of scrub. The eggs were fresh.

This clutch differs very considerably from the one I exhibited on January 11, 1933 (Bull. B. O. C. liii. 1933, pp. 90–92). The eggs are much more pyriform, almost sharply so. The ground-colour is pale olive-green or oil-green. The so-called "odd" egg is considerably paler and conspicuous. The markings are paler and more confluent and more or less capped. The underlying markings are more numerous and conspicuous.

Measurements.	mm.	*Weights.*	mg.
Average, 4 eggs	41·9×30	Average, 4 eggs	957·2
No. 1	42 ×29	No. 1	954
,, 2	41 ×30·3	,, 2	993
,, 3	41·5×31	,, 3	965
,, 4	43 ×29·8	,, 4 (the "odd" egg) ..	917

Average measurements and weights for eight eggs, including the four previously exhibited :—41·4 × 29·4 mm., 938·4 mg.

Prof. Rowan informs me that no other eggs beyond those exhibited of *L. g. hendersoni* have so far reached this country ; all other clutches collected by him and his friends were acquired by American collectors.

I have called attention to the so-called " odd " eggs in these two clutches of *L. g. hendersoni*. It is well known that these eggs persist in many clutches of the Limicoline species. With some it is very constant. During the weighing of a great number of clutches of eggs of the birds belonging to this order I have discovered that, without exception, the " odd " egg is not only the least marked of the clutch, but also by far the lightest in weight, due, in my opinion, to the fact that it is the last egg of the clutch laid, pointing to a period of exhaustion in the reproductive organs, and to a loss of shell-forming matter.

The clutch of three eggs of the Greater Yellowshank exhibited is very interesting. Two of them, it will be seen, have the same ground-colour as those I exhibited in October 1930 (Bull. B. O. C. li. 1930, pp. 9–11). The third egg has a ground-colour of drab, perceptibly tinged greenish. One egg is very remarkable, and has nearly all the markings at the small end, *i. e.*, it is a mis-marked egg, laid the small end first, a most unusual occurrence in eggs of the Limicolæ. Among the 2,543 eggs of this family, representing 58 species, in my collection it only occurs in five cases—twice in a clutch of Redshank (*Tringa totanus totanus*), once in the Curlew (*Numenius arquata arquata*), and once in the Stilt (*Himantopus h. himantopus*). As I consider these are very interesting specimens, they are included in the exhibit.

The clutch of two is also interesting, and uneven ; one has the ground-colour reddish-brown, the other somewhat resembles the eggs of the Moorhen (*Gallinula c. chloropus*) both in the ground-colour and markings, proving that the ground-colour of these eggs varies considerably.

Measurements (13 eggs), Bunyard's series :—49·6 × 34·0 mm.

Weights (13 eggs), Bunyard's series :—1·503 mg.

I exhibit the whole of my series of eggs of the Yellowshank, including the two recent clutches from Prof. Rowan. The clutch of three is typical, the clutch of four is small for this species; the ground-colour is unusual and decidedly greenish instead of pinkish-buff.

THE CLUTCH OF SMALL EGGS.

Measurements.	mm.	*Weights.*	mg.
Average, 4 eggs	28·4×27·7	Average, 4 eggs	659·2
No. 1	38·2×28·8	No. 1	740
„ 2	38·1×27	„ 2 the "odd" egg	590
„ 3	38 ×28	„ 3	667
„ 4	39·2×27	„ 4	640
Average, 31 eggs	41·8×28·8	Average, 31 eggs	829

I also exhibit a clutch of three eggs of the Corn-Bunting (*Emberiza c. calandra*) found at Cliffe-at-Hoo, Kent, on June 25, 1933, showing true erythrism.

The nest was situated in a partly harvested field of cabbages, and was found by watching the female return. There were originally four eggs, one of which was on the point of hatching; the three exhibited were all unfertile.

The clutch when tested by internal illumination showed an entire absence of any bluish or greenish tinge, usually present in the shell of the eggs of *E. c. calandra*. They were not unlike the true erythristic form of egg of the Blackcap (*Sylvia atricapilla*).

The Rev. F. C. R. JOURDAIN remarked that while he did not propose to traverse all the erroneous statements made by Mr. Bunyard, he had evidently been misled by Professor Rowan's information that no other eggs of *Limnodromus g. hendersoni* beyond those exhibited had so far reached this country. This was not the case, as he himself had one clutch in his own collection, while Mr. Maples had another, Major Malcolm a third, and Lt.-Col. Meiklejohn a fourth. Mr. Massey had also a set from the North-West Provinces which were either this race or *L. g. scolopaceus*. There were thus at least 16 to 20 eggs in English collections besides the eight eggs exhibited. As

the race on the British List was *L. g. griseus*, the eggs of which were still unknown, it was impossible to quote measurements in the 'Practical Handbook,' and those given were of the western race, *L. g. scolopaceus*.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following notes :—

1. On the Correct Name and Exact Type-locality for the Greater Flamingo of Europe and Africa.

So far as we can trace, the names *Phœnicopterus antiquorum* and *P. roseus* were used indiscriminately for this bird up to the time of the publication of Salvadori's vol. xxvii. of the Cat. Bds. Brit. Mus. 1895, when *roseus* was more generally used, although we cannot find that Salvadori published any note giving his reasons for adopting this name, which is first found in Barrère, Orn. Spec. Nov. 1745, p. 21 (no locality), as *Phœnicopterus roseus*, but, being pre-Linnæan, cannot be used. Between 1895 and 1920 *roseus* was generally used, when in the latter year Hartert resurrected *antiquorum* in his Vög. pal. Faun. ii. 1920, p. 1266, and this has been followed by most authors, including Sclater, Syst. Av. Æthiop. i. 1924, p. 39; Meinertzhagen, Nicoll's Bds. Egypt, ii. 1930, p. 453; Bannerman, Bds. Trop. W. Afr. i. 1930, p. 126; and Chapin, Bds. Belg. Congo, i. 1932, p. 488.

We have critically examined the subject matter on pp. 586–589 in Temminck's Man. d'Orn. ii. 1820, and we are of opinion the description on p. 586 is that of the genus, being followed by the distribution, habits, food, nesting, moults, difference in sexes, colour of nestling, the webbed feet, gregariousness, shyness, formation in flight, and mode of walking of these birds (les oiseaux), that is to say, of the Flamingoes as a genus. About half-way through the above is to be found the following :—" Two small species, half the size of the European one, live in Africa and Asia; the plumage of the young undergoes the same changes." This seems to us to very clearly refer to *Phœniconaias minor*, which must have been known to Temminck, as it was named by Geoffroy in 1798. Then follow the remarks, which read :—" It still seems to me very doubtful

whether one ought to consider the American Flamingoes as being the same species as the European and African; I have not yet come to certain conclusions about it, but researches made make me anticipate that they are two distinct species; when these differences will have been established one will be able to give the Flamingoes from Europe and Africa the name of *Phœnicopterus antiquorum*, and to leave to that of America the name of *Phœnicopterus ruber*."

After this, on p. 587 (bottom) and pp. 588, 589, is a description, references, plumages, distribution, food, and nesting of *Phœnicopterus ruber* Linnæus. Therefore the only place where the name *antiquorum* is mentioned is on p. 587, under "Remarks," and there is certainly no description whatsoever, nor even any mention, of a character by which the European and African bird can be distinguished from the American bird. The name *antiquorum* is, therefore, a *nomen nudum*, and cannot be used. The European and African form of *Phœnicopterus ruber* must bear the name of:—

Phœnicopterus ruber roseus Pallas.

Phœnicopterus roseus Pallas, Zoogr. Rosso-Asiat. ii. 1827, p. 207: mouth of the River Volga, Caspian Sea, Southern Russia.

The exact type-locality as given above is to be found on p. 207 of Pallas's Zoogr. Rosso-Asiat. ii. 1827.

As we have accepted the date of Pallas's work as 1827 we must consider the name *major* given by Dumont, Dict. Sci. Nat. xvii. 1820, p. 96. Dumont refers to Geoffroy, Bull. Sci. Soc. Philom. i. 1798, p. 98, whom he quotes for the three species of Flamingo then recognized, but replaces *ruber* by *major*, although he copies correctly the vernacular name and the description given by Geoffroy, merely adding to the description four extra words to make better reading. As we know that *ruber* is now the American bird, Dumont's *major* must be considered merely a substitute name, and would in future appear in the synonymy of *Phœnicopterus ruber ruber* Linnæus and not of *Phœnicopterus ruber roseus*, as has been done in the Cat. Bds. Brit. Mus. xxvii. 1895, p. 14 and Hartert, Vög. pal. Faun. ii. 1920, p. 1266, under *P. r. antiquorum*.

2. On the Occurrence of the Garganey, Anas querquedula Linnæus, in Tanganyika Territory.

With reference to our note in the Bull. B. O. C. liii. 1933, p. 245, we have to record a third occurrence of this Teal from Tanganyika Territory.

This is an adult female obtained by Mr. Eric D. Barr at Mayonga River, Isaka, Shinyanga District, on December 12, 1932. The collector has presented this specimen to the British Museum (Natural History). This further record seems to show that this bird, together with several other migratory Ducks, is a regular visitor to the northern half of Tanganyika Territory during the non-breeding season.

Mr. Jack Vincent sent the following note :—

The Correct Type-locality of the Vulturine Guineafowl, Acryllium vulturinum (Hardwicke).

In the 'Systema Avium Æthiopicarum' the type-locality is given as "West Africa, *errore*," and the fact that the bird is confined to Eastern Africa led me to search in early literature for something more accurate, with the following result :—

1.—1834. Hardwicke, Proc. Zool. Soc. 1834, p. 52, gives West Africa, and says if the type "was brought from the western coast of Africa it had been in confinement." This bird could not have originated from West Africa, since the species does not occur there, as we know, and as shown by Schlegel & Pollen, Recher. de Madag. 1868, p. 119.

2.—1837. Gould, Icon. Av. pl. 8, 1837, gives West Africa, and refers to Hardwicke, reference no. 1 above.

3.—1845. Gray, Gen. B. iii. 1845, p. 501, gives no locality, but refers to nos. 1 and 2.

4.—1851. Reichenbach, vol. on Gallinaceæ, pl. 2956, p. 290, gives no locality, but refers to nos. 1 and 2.

5.—1857. Hartlaub, Syst. Orn. West Afr. 1857, p. 200, gives West Africa, and references to nos. 1, 2, and 4.

6.—1861. Layard, Ibis, 1861, p. 120, gives Madagascar, from E. Layard, saying that he obtained living examples at Bojana Bay, on the N.W. side of Madagascar. This locality

cannot be accepted, since the bird does not occur on that island.

7.—1861. Hartlaub, J. f. Ornith. 1861, p. 266: west coast of Madagascar, gives reference to no. 5, and corrects it to west coast of Madagascar by referring to no. 6.

8.—1863. Sclater, Proc. Zool. Soc. 1863, p. 126, gives Madagascar, and references to nos. 1, 2, and 6.

9.—1863. Pollen, Ned. Tijdschr. v. Dierk. 1863, p. 315 includes the species in a list of Madagascar birds, and refers to nos. 1, 2, 4, 5, and 6.

10.—1864. Layard, Ibis, 1864, p. 133. In a letter Layard says that he saw two live specimens which had come "from the eastern coast of Africa, a little to the northward of Zanzibar." Since in that locality we have the Pangani District, wherein *Acryllium vulturinum* occurs, I maintain that the type-locality for the Vulturine Guineafowl should in future read the Pangani District of Tanganyika Territory.

Dr. C. B. Ticehurst forwarded the following descriptions of two new forms of Indian birds :—

1. **Phylloscopus reguloides kashmiriensis,** subsp. nov.

Description.—Differs from *Phylloscopus reguloides reguloides* (type-loc. Calcutta) in having the upper-parts, edges to the wings, and coverts a yellower green; the lateral coronal bands are less dark and so not so conspicuous; usually there is less white in the outer tail-feather; also it has a longer wing.

Measurements.—Wing, ♂♀, 58·5–64·5 mm., as against 55–59 mm. in *reguloides*.

Distribution.—North-West Himalayas: Kashmir to Dehra Dun.

Type.—♂, Simla, 28. 9. 1877. W. Davison coll. British Museum. Brit. Mus. Reg. no. 1886.7.8.975.

Remarks.—Nine specimens examined and compared with a large series of *reguloides* from Bengal and Sikkim. A series in fresh plumage is easily separable, as are most individuals. The qualitative distinctions are those shown in other North-West Himalayan *Phylloscopi* compared with north-eastern.

2. **Vivia innominata simlaensis,** subsp. nov.

Description.—Similar to *Vivia innominata innominata* (type-loc. Sikkim), but longer in the wing and, on the whole, with paler, less yellow upper-parts.

Measurements.—Wing, 3 ♂♂, 6 ♀♀, 59–62·5 mm., against 54–59 mm. in *innominata* (21 measured).

Distribution.—North-West Himalayas, from Murree to Dehra Dun. Birds from Nepal (*Vivia nepalensis* Hodgson, *Piculus rufifrons* Gray) belong to the typical form.

Type.—♀, Murree. Hume coll., British Museum. Brit. Mus. Reg. no. 1887.8.10.2174.

Remarks.—Small non-migratory birds such as *Vivia* show very little variation in wing-length, so that differences, though small, if constant and if they accord to geographical distribution, should be recognized.

Colonel R. Meinertzhagen sent the following descriptions of new subspecies of Wren and Francolin :—

Troglodytes troglodytes syriacus, subsp. nov.

Description.—Not a very constant nor distinct form, but with sufficient differences to justify separation. Differs from *T. t. troglodytes* in being more barred underneath, in some cases the barring extending to the throat and always to the lower breast. Bill as long as in *T. t. cypriotes* and much longer than in *T. t. troglodytes*, but paler and greyer than *T. t. cypriotes*. Bill longer than *T. t. hyrcanus* and the plumage slightly more heavily barred above and below. In my Lebanon series two are uniform above and five barred.

Distribution.—The main Lebanon Range above 3000 feet, perhaps in winter to lower levels and to the Jordan Valley.

Type.—In my collection, ♂, Zachle, Lebanon, 3000 feet, 30. x. 1919.

Remarks.—Hartert (Vög. pal. Faun. i. 1910, p. 780), under *T. t. cypriotes* draws attention to the Lebanon bird as being rather long-billed, but not particularly pale ; but at that time Hartert had but a single specimen. The Tring collection

subsequently received a large series from the Lebanon Range, but, unfortunately, these passed to America before they were critically examined.

Francolinus francolinus billypayni, subsp. nov.

Description.—Males generally darker than any form except *F. f. melanonotus*, from which it differs only in being slightly paler. Ear-coverts pure white and not quite so dark on the upper parts. Rump and upper tail-coverts not so closely barred. Centres of feathers on back black. Females much darker than any form except *F. f. melanonotus*.

Distribution.—Only known from the type-locality, which is isolated by over a hundred miles from any other colony.

Type.—In my collection, ♀, north shore of the Lake of Antioch, Syria, 20. v. 1933.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following descriptions of two new subspecies of Kestrel :—

Falco tinnunculus tanganyikæ, subsp. nov.

Description.—Similar in size to *F. t. tinnunculus*, but much darker and richer in colour ; mantle, back, scapulars, and wing-coverts deep chestnut-brown, with no vinous tinge, darker and richer than either *F. t. rufuscens* or *F. t. carlo* ; grey of crown, rump, upper tail-coverts, and tail dark slate, deeper in shade than either *F. t. rufuscens* or *F. t. carlo* ; below much darker and richer than *F. t. tinnunculus*, *F. t. rufuscens*, or *F. t. carlo*, more rufous to chestnut, with dark chestnut edges to flank-feathers. Female also chestnut-brown above, without vinous tinge ; below darker than other races, more rufous and chestnut.

Soft parts :—Irides brown, bill blue-slate, cere, round eyes, and legs and toes lemon-yellow ; soft parts of female the same.

Measurements.—Wing 238 ; tail 149 ; culmen 14 ; tarsus 41 mm.

Distribution.—Tanganyika Territory.

Type.—♂ adult, Kigoma, Tanganyika Territory. Collected by Capt. Claude H. B. Grant on October 21, 1928 (Brit. Mus. Reg. no. 1929.5.13.1).

Remarks.—An adult male and female, paired, with a brood of four young birds which had bred in the roof of the collector's bungalow.

The measurements of this pair are :—

Wing : ♂ 238 ; ♀ 248 mm. Tail : ♂ 149 ; ♀ 157 mm.

Besides the above family party, we have examined an adult ♀ from Kondoa-Irangi collected on May 28, 1928 (Brit. Mus. Reg. no. 1929.8.17.12).

This specimen is in moult and the wing cannot be measured, but the tail measures 159 mm. ; but another from M'Kangagi, Uluguru Mts., a ♀, kindly lent to us by the Museum of Comparative Zoölogy, dated October 20, 1926, no. M.C.3. 237536, has a wing-measurement of 239 mm.

Falco tinnunculus buryi, subsp. nov.

Description.—On the average equal in size to *F. t. carlo*. Similar to *F. t. tinnunculus*, but more richly coloured, especially below, and thighs more rufous, grey crown of head more distinctly streaked, grey rump, upper tail-coverts, and tail similar to *F. t. tinnunculus*. Mantle, back, scapulars, and upper wing-coverts lacking the vinous tinge of *F. t. carlo*. It is, however, in the female that the differences are most striking, as the adult is both above and below much warmer and richer in colour than either the female of *F. t. tinnunculus*, *F. t. rupicolœformis*, or *F. t. archeri*, but is more rufous and lacks the darker vinous tinge of the female of *F. t. carlo*, and the rump, upper tail-coverts, and tail are wholly slate-coloured, the tail being partially barred.

Soft parts :—Bill slate, cere, orbital patch, and feet yellow.

Measurements.—♂, wing 231 ; tail 160 ; culmen 14 ; tarsus 36 mm. ♀, wing 248 ; tail 172 ; culmen 14 ; tarsus 42 mm.

Distribution.—Southern Arabia (Aden Protectorate, east to Dhufar).

Types.—♀ adult, Dthala, Amiri District, South Arabia. Collected by G. W. Bury on March 11 (Brit. Mus. Reg. no. 1902.12.12.17).

♂ adult, Menacha, Yemen, South Arabia. Collected by G. W. Bury on December 27, 1912 (Brit. Mus. Reg. no. 1913.7.18.130).

Remarks.—We have in this case named two types and given the female type first, as the racial characters appear more defined in this sex; but at the same time it seems desirable that a male type should be designated in accordance with the accepted practice.

Five males and six females examined, which measure :—

Wing : ♂ 229–242 ; ♀ 224–249 mm. Tail : ♂ 156–162 ; ♀ 145–170 mm.

Named in honour of the late Mr. G. W. Bury.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed also sent the following description of a new subspecies of Kite :—

Milvus migrans tenebrosus, subsp. nov.

Description.—A yellow-billed form, the young bird having a dark bill. Very much darker and blacker in general appearance than *M. m. ægyptius*. Differs from *M. m. parasitus* in being much darker, more sooty and blackish. Size equal to *M. m. parasitus*.

Soft parts :—Bill yellow, iris brown, feet yellow.

Measurements.—Wing 400; tail 265; culmen 24; tarsus 49 mm.

Distribution.—West Africa south to Angola, Northern Rhodesia, and Upper Zambesi, Sudan, Abyssinia to Uganda, Kenya Colony, and Tanganyika Territory, Belgian Congo, Zanzibar and Pemba Island.

Type.—♂ adult, Beoumi, Ivory Coast, West Africa. Collected by W. P. Lowe and H. R. Hardy on December 21, 1922 (Brit. Mus. Reg. no. 1923.11.12.13).

Remarks.—Forty-six specimens examined. Wing 395–454 mm.

Mr. E. C. Stuart Baker forwarded the following description of a new race of *Krimnochelidon concolor* :—

Recently Mr. T. R. Livesey has forwarded to me for examination several very interesting little parcels of birds from the Southern Shan States, mostly collected at an elevation of about 6000 feet in the vicinity of Sintaung. Among these are three specimens of *Krimnochelidon concolor*, originally described by Sykes from the Deccan, which is a resident bird over a great part of South and Western India, extending casually so far East as Western Bengal, and also obtained by Forrest in Yunnan. The specimens sent appeared to me to be darker than the typical form, and on comparison with the British Museum series this proves to be the case.

I accordingly name it

Krimnochelidon concolor sintaungensis, subsp. nov.

Description.—Similar to *K. c. concolor*, but decidedly darker above, more blackish, less brown ; below very little darker, but with the reddish tinge rather prominent.

Measurements.—As in the typical race. Wing : ♂ 112, ♀♀ 108–110 ; tail about 55 ; bill at front 20 ; tarsus 7 mm.

In the typical form the wings of a few measured vary from 104 to 118 mm.

Type.—♂, collected by T. R. Livesey in Sintaung, 6000 feet, Shan States, 20. ii. 33. In the British Museum. Brit. Mus. Reg. no. 1933.10.10.9.

Remarks.—In the British Museum series of this species there is one specimen collected by Messrs. Craddock and Thompson in the Shan States which was at once detected in the box by its darker colour above ; wing 113 mm.

I examined five specimens of the new race and a series of the typical form from Western India.

Mr. Livesey found this little Martin breeding in rifts in the limestone ground, in hollows between the hills. Unlike the Western form, these birds were breeding in colonies of some size.

Mr. Gregory M. Mathews sent the following notes :—

1.—Kuhl, in Beit. Zool. Vergl. Anat. Zweite Abth. 1820, p. 148 (pref. April 9), uses *Proc*[*ellaria*] *munda*, but there the name is indeterminable ; he puts *Nectris munda* Banks as a synonym.

In Rowley's Miscell. i. May 1876, p. 236, Salvin used *Nectris munda*, and here also it is indeterminable, the description being "supra cinereo-nigricans subtus nivea." The locality for both names is lat. 48° 27′, long. 93°, in the South Pacific Ocean.

Another name also indeterminable may belong here :—

Puffinus bicolor Tschudi, J. f. Ornith. May 1856, p. 187 : Sala-y-Gomez and Waihu.

In vol. ii. of 'The Birds of Australia,' May 30, 1912, p. 59, I published the full description of Solander's *Nectris munda*. This name cannot stand. So for the bird described on p. 59 I give the name

Puffinus kuhliana, nom nov.,

and the locality as above.

2.—A description of a new genus of Whale-bird :—

Genus **Attaprion,** gen. nov.

Type, *Procellaria desolatus* Gmelin.

Differs from *Pachyptila* Illiger in having the inter-ramal space feathered and not distensible.

3.—New name for a Petrel :—

Pterodroma satalandia, nom. nov.,

for the bird described as *Procellaria sandaliata* in 'Birds of Australia,' ii. July 31, 1912, p. 151 ; not of Salvin, 1876.

NOTICES.

The next Meeting of the Club will be held on Wednesday, November 8, 1933, at the Knightsbridge Hotel, Knightsbridge, S.W. 1. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

1. Mr. David A. Bannerman, Chairman of the Club, will deliver his Annual Address.
2. The Rev. F. C. R. Jourdain will exhibit an egg of *Puffinus puffinus yelkouan*.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXII.

The three-hundred-and-sixty-seventh Meeting of the Club was held at the Knightsbridge Hotel, Knightsbridge, S.W. 1, on Wednesday, November 8, 1933.

Chairman : Mr. D. A. Bannerman.

Members present :—Dr. W. J. Adie; W. B. Alexander; E. C. Stuart Baker; Miss P. Barclay-Smith; F. J. F. Barrington; P. F. Bunyard; Hon. G. L. Charteris; Miss J. M. Ferrier; H. A. Gilbert; W. E. Glegg; Miss E. M. Godman; Rev. J. R. Hale; Dr. J. M. Harrison; R. E. Heath; Dr. E. Hopkinson; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); Dr. N. S. Lucas; T. H. McKittrick, jun.; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*); Capt. J. H. McNeile; Dr. P. H. Manson-Bahr; G. M. Mathews (*Vice-Chairman*); J. G. Mavrogordato; T. H. Newman; C. Oldham; F. R. Ratcliff; W. L. Sclater; D. Seth-Smith; Major A. G. L. Sladen; Dr. A. Landsborough Thomson; B. W. Tucker; H. M. Wallis; H. F. Witherby; C. G. M. de Worms.

Guests :—Mrs. Gilbert; W. H. Hale; G. A. B. Jenyns; E. M. Nicholson; Miss P. Pittard; Mrs. W. L. Sclater; A. E. L. Sladen; Mrs. H. F. Witherby; T. F. Witherby.

Mr. David A. Bannerman, Chairman of the Club, delivered his annual address :—

Chairman's Address.

General.

Ladies and Gentlemen,—

Since I last addressed you we have had to deplore the deaths of a past and two present members—Viscount Grey of Fallodon, Ernest E. Adams, and Thomas G. Laidlaw.

Lord Grey had been a Member of the Club since 1909, but had resigned his membership in 1932 owing to ill-health. His well-known interest in bird protection, for which he worked ceaselessly, and his true love of birds were outstanding features in a particularly charming character. The birds have lost a good friend and our Club a very distinguished public servant who endeared himself to all who knew him.

Although never a member of the Club, ornithology has suffered a severe loss through the untimely death on January 29, 1933, of T. A. Coward. He was the best known naturalist in the north of England and a most popular writer. A member of the B. O. U. for many years, his influence as a field-naturalist and writer on the present generation—particularly the younger members—whom he was always willing to help and advise, can hardly be over-estimated. He will be remembered chiefly for his books, of which his ' Birds of the British Isles and their Eggs ' is doubtless the best known.

During the last session we had the honour of entertaining two ornithologists from abroad, Dr. Finn Salomonsen from Denmark and Dr. C. H. Kellaway from Melbourne, Australia, and at our last meeting Captain Guy Shortridge, from King William's Town Museum, Cape Colony, was our guest. I need hardly say with what pleasure this Club entertains ornithologists from our Dominions and foreign countries, and I hope I shall have the pleasure of welcoming many more before my term of office as your Chairman comes to an end. No more important function can be carried out at the meetings of the Club than that of cementing the bonds of friendship between ornithologists of all nations, and we welcome the

opportunity which our meetings afford of receiving them in our midst.

The most important event of the period under review is unquestionably the initiation at Oxford of the British Trust for Ornithology. The main object of the Trust is to form a centre for biological work in birds. A great deal of excellent work has been done in the past on these lines, but has suffered greatly from the lack of co-ordination and consequent overlapping which takes place. It is of the greatest importance, in order to advance our knowledge of the biology of birds, that the work done should be on systematic lines, just as museums carry out systematic work on classification.

The Institute at Oxford will be under the supervision of a Director, who will be assisted by an advisory committee of experienced field-workers; their task will be to initiate fresh schemes and advise on programmes of work.

Such an Institute must be on a permanent footing, and, therefore, must have funds to put it on a proper working basis. A public appeal was made, with the result that a certain sum is now available.

In this connection I have to make a very important announcement, and I do so with the very greatest pleasure. Many of you are doubtless aware that the President of the British Ornithologists' Union, Mr. Harry F. Witherby, has in the course of his life formed a large and valuable collection of birds entirely Palæarctic, and especially rich in birds in immature plumage and moult. It is the largest collection of Palæarctic birds now remaining in this country. Mr. Witherby has offered this collection to the Trustees of the British Museum (Natural History), who, at their meeting last month, agreed to purchase it for the sum of £1500. £100 of this Mr. Witherby intends to spend on the development of a Nature Reserve surrounding his own Surrey home; the balance, £1400, he is handing over to the British Trust for Ornithology to form the nucleus of a permanent fund. I would emphasize the fact that Mr. Witherby obtains no pecuniary gain whatsoever from the transaction. The British Trust for Ornithology receives a splendid gift and the National Collection is enriched

by the acquisition of first-class Palæarctic material for study. This magnanimous action of Mr. Witherby's should place the British Trust on firm ground, and I hope such an example, coming from one who has done so much for British ornithology, will inspire others to support the Trust with gifts of money or literature.

At the conclusion of my address I shall ask Mr. Witherby to make a personal statement.

I have now to refer to a collection of birds in which we shall always have a great personal interest, even though it is now so far away. I refer to Lord Rothschild's collection, which was acquired by the American Museum of Natural History. As you know, that vast collection, comprising some 280,000 specimens, reached New York eighteen months ago, and it will surprise some of you to learn that the birds are still reposing in their packing-cases. The authorities of the Museum are naturally as anxious as we are over here to have the birds unpacked, and the collections again made available for study, but their hands have been tied by the failure of the New York City administration to hold to the letter or spirit of a contract entered into with that institution to provide half the necessary funds to complete the new wing of the Museum in which the Rothschild collection will be housed. Half the money required is available through the gift of the late Mr. H. P. Whitney, but by the terms of the bequest the sum expended from the Whitney fund must be equalled, dollar for dollar, by the City before work can be resumed. Requests for the loan of specimens from the British Museum and other institutions, as well as from private individuals, have to be met with a refusal, to the great regret of the officials of the American Museum, on the grounds that the collection cannot be unpacked. Thus for the time being this vast material is lost to the scientific world. I am sure I am voicing the opinion of all members of the British Ornithologists' Club when I express our sympathy with those now in charge of the collection, and our hope that the New York City administration will soon see its way to remedy the existing state of affairs.

Regional Review
(October 1932 to October 1933).

I now come to review the year's work in the field of ornithology, and, following the plan of my address last year, I shall group my observations under the various countries.

Europe.

To deal first with the field-work of our members and brother ornithologists in Great Britain.

It is satisfactory to note that, as first made public last year, the Honey-Buzzard (*Pernis a. apivorus*) seems to have definitely established itself, for it has now been found nesting in yet another locality. The preservation of this species as a breeding bird is unquestionably due to the generous action of a dealer, Mr. C. H. Gowland, whose unselfish efforts to save a pair in the first instance from a keeper's gun and a game-preserver, by undertaking to pay compensation for any damage the birds did, cannot be too widely known.

The first authentic instance for many years of a Hen-Harrier (*Circus c. cyaneus*) breeding—and successfully hatching out four young in one of the home counties in 1932—is published in 'British Birds,' on the authority of Mr. C. V. Stoney and Mr. N. Thompson.

A second instance of the Redwing (*Turdus musicus*) breeding in Scotland was recorded at one of our own meetings last year (May) by Dr. P. R. Lowe. I mentioned the previous record in my address to you last year.

Finally, I may perhaps mention the occurrence, as reported by the Rev. J. R. Hale, of the Black Redstart (*Phœnicurus ochrurus gibraltariensis*) breeding at Woolwich. An account of this was published in 'British Birds,' xxvii. 1933, p. 74. It is, I understand, the second authentic record of the bird having bred in Kent.

Passing from the work accomplished in our own islands, expeditions have been made by our members to various countries overseas.

Mr. C. H. Hartley accompanied an Oxford University Expedition as ornithologist to Spitsbergen, but I have not yet heard what work was accomplished.

Mr. E. G. Bird has been in Iceland, where he joined forces with Mr. Haig-Thomas and visited the breeding grounds of the Icelandic Geese in Central Iceland, and the little-known Melrakka Sljetta Peninsula.

Mr. Stuart Baker has visited Lapland in company with Dr. Ivar Hortling, principally to investigate the breeding ranges of the Redpolls (*Acanthis hornemanni exilipes*, *A. flammea flammea*, and *A. f. holboellii*), and believes that he has solved the problem successfully.

Mr. E. S. Steward has visited East Finmark, with the approval of the Norwegian Government, to investigate the reported breeding of Steller's Eider.

Messrs. David Lack, G. C. L. Bertram, and B. B. Roberts spent three weeks in Iceland, where an ecological survey was undertaken; they also landed on Grimsey, where they listed all the birds seen. Finally, the party spent three weeks with the Charcot Mission in East Greenland at Scoresby Sound (Hurry Inlet), and later sailed down the Blosseville coast. They found Red-necked Phalarope, probably Lapland Buntings, and Meadow-Pipits breeding further north than previously known in East Greenland.

Mr. W. B. Alexander, accompanied by Miss M. Barclay, Mr. J. R. Pease, Mr. and Mrs. B. W. Tucker, and Mr. H. F. Witherby, visited Heligoland, and the first three mentioned remained on this island seventeen days, from September 18 to October 4, the other members of the party shorter periods. They received great kindness from Dr. R. Drost, Director of the "Vogelwarte," and his assistant, Dr. M. Schildmacher, and were granted all the facilities of the institution, which includes a museum, study collection of skins, library, and "catching gardens" (Fanggarten). Nearly 2000 birds were caught and ringed during their visit, and they were able to handle and examine the plumages, etc., of many hundreds of living birds, ranging from Goldcrests to Sparrow-Hawks, and including Bluethroats, a Marsh-Warbler, and an adult

male Red-breasted Flycatcher. During the seventeen days they saw 100 species of migrants, including, besides those which were caught, Shore-Lark, Lapland Bunting, Tawny Pipit, and Goshawk.

Capt. P. W. Munn continues his researches on the birds of Mallorca, and has made two important additions to our knowledge of the island during the past year.

The Hon. G. Charteris, with Messrs. G. Tomkinson and H. A. Gilbert, visited Hungary and were able to add a new species to the Hungarian breeding list, *Calandrella b. brachydactyla*.

Capt. J. H. McNeile was successful in finding the Great Snipe (*Capella media*) breeding in Esthonia; while the Rev. F. C. R. Jourdain worked in Haute-Savoie and Mr. Burras in Provence.

Lt.-Col. R. F. Meiklejohn has worked in Greece and also in Crete, studying, among other objects, the breeding of Rüppell's Warbler.

Mr. Hugh Whistler, accompanied by his wife, has just set forth on a visit to Sicily. There is much work to be done in that island, and travelling, as he is, with the full permission of the Italian Government, I feel sure we may expect great results. I know of no one more competent than Mr. Whistler for the work which lies before him. Mr. C. G. Bird is also at work among the Cyclades.

Colonel R. Meinertzhagen, accompanied by Mr. W. H. Payn, has been travelling extensively as usual. In March 1933 they visited the Jebel Druze east of Damascus, where they were able to ascertain the volume of spring migration and collect the breeding birds of that isolated region. A trip was made into the north Syrian Desert, penetrating as far as Rutbah in Iraq, and to the deserts which lie to the south of that place; the areas of black-lava desert which are characteristic of that region were also visited. Colonel Meinertzhagen tells me that his object was to collect evidence as to influence of environment on plumage, and that much valuable material was obtained on this important aspect. Subsequently collections were made in the Anti-Lebanon, and the travellers crossed the highest part of the main Lebanon Range, such rare

residents as *Serinus syriacus*, a new Wren, *Troglodytes t. syriacus*, *Rhodopechys sanguinea*, and *Eremophila alpestris bicornis* being seen and obtained in their breeding haunts. In late May the Lake of Antioch was visited, where the breeding colonies of *Anhinga rufa*, *Phalacrocorax pygmaeus*, *Platalea leucorodia*, and other water-birds were studied. June was spent in Bulgaria touring the Rhodope Mountains and seeing the rare *Picoides tridactylus*. Finally, in September Colonel Meinertzhagen visited Ushant off the Brittany coast, remaining there till early October. He gave us an interesting account of his experiences there at our last meeting. We are looking forward to the published results of these travels, and I must congratulate him on the enormous amount of work he manages to get through in a year.

Of French expeditions, the Mission Charcot of the Polar Year 1932–1933 has returned from Greenland with a small but interesting collection of birds valuable for the light which they throw on the dates of migration and nidification of Greenland birds.

Asia
(*Asia Minor, India, Burma, and Siam*).

Mr. F. Ludlow and Captain Sherriff have been collecting in the higher parts of Bhutan, a country unexplored since the time of Captain Pemberton's Mission in 1838. Conditions were very difficult owing to the abnormally wet season and thick undergrowth, but some 600 birds were obtained. Those from eastern Bhutan prove to be of great interest, and contain at least two new forms.

Sir Richard Maconachie, assisted by Captain Fletcher, is collecting birds at Kabul, and two small consignments which are of great interest have been received at the British Museum.

Mr. Salim Ali undertook a partial survey of Hyderabad State, and is now about to make a similar survey in the Cochin State.

Mr. J. K. Stanford has been investigating the avifauna of the high ranges between north-east Burma and Yunnan.

Mr. H. C. Smith has been working in the Pegu Yomas.

Dr. Hugh M. Smith, an American ichthyologist, has been collecting birds in Siam for the U.S. National Museum.

North Siam was also visited in 1932–33 by another American, Mr. R. M. de Schauensee, who collected 2800 skins and added some new records for Siam. Most of his work was carried out in the hills between 2000 and 6000 feet. Later he made a small collection of 170 skins in the southern Shan States of Burma, collecting as far north as Keng Tung.

Of German Asiatic expeditions, Dr. Kummerlöwe and Dr. Neithammer travelled from Angora to Eneboli, on the Black Sea, from April to July 1933, collecting birds in the high mountains of northern Asia Minor and discovering there several unexpected species. They are at present out again in the same district. A report will, I think, appear next year.

Arabia.

Mr. H. St. J. Philby, during his journey across the Rub Al Khali, collected a few birds which were recorded in an Appendix to the account of his travels entitled "The Empty Quarter." A fuller account will appear in the 'Journal of the Bombay Natural History Society.'

Colonel Boscawen followed up his previous trip to the Hadramat in the winter of 1931 by a second expedition last winter, and has sent home another small collection which adds much to our knowledge of Arabian birds.

Africa.

Africa has once again been the centre of much activity, and if rather less so than for the period I reviewed twelve months ago, it must be remembered that Admiral Lynes, Colonel Meinertzhagen, Mr. G. L. Bates, and Mr. Jack Vincent have all been busy working out and publishing the results of their important expeditions in that continent to which I referred last year.

Admiral Lynes has again left our shores, and is back in the Belgian Congo, where he has been joined within the last few months by his former companion, Mr. Jack Vincent. It is his intention to spend about nine months in the field, and the

collections formed will be divided between the British Museum (Natural History) and the Musée Congo Belge.

I am sure that you will wish me, on your behalf, to congratulate the Admiral on his recovery from an extremely nasty accident, he having fallen into a big-game pit and seriously damaging his shoulder. Fortunately he was able to receive medical aid within a few hours, and is, I understand, again carrying on his work as if nothing had happened.

Mr. R. E. Moreau, who was present and spoke at our last meeting, is continuing to do excellent work in the Usambara Mountains and to send specimens home to the British Museum. Just before he returned on leave he was able to pay a visit to Mount Kilimanjaro.

In our West African colonies an increasing interest is being taken in bird life, and the field-notes which reach me by almost every mail from West Africa bear witness to the accuracy of these observations.

At our last meeting I gave an account of some important discoveries in the Azare district of Northern Nigeria made by Dr. P. A. Buxton and his colleagues when investigating the tsetse flies of that district. I must refer you to the last 'Bulletin' for details. Dr. Buxton has, I am glad to say, promised to show some slides illustrating this country at one of our meetings this season.

In the Benin Province Mr. W. A. Fairbairn has continued to make valuable observations on the birds of the southern forest area.

Mr. Denis Golding has made an extensive tour in the Lake Chad area, and has sent an interesting paper to 'The Ibis' on his experiences in this still imperfectly known district.

Lieut.-Commander Hughes, R.N., was able to make some observations of interest in Sierra Leone when engaged in ocean survey work in H.M.S. 'Endeavour' last winter.

The forests of the Gold Coast are still imperfectly explored, and I am glad to say that Mr. Willoughby P. Lowe is shortly starting on a collecting tour in Ashanti on behalf of the British Museum, from which we shall expect interesting results.

Mr. Ronald Shuel (Commissioner of Police in Nigeria) and his wife have continued their investigations on the nidification of West African birds, and have forwarded to the British Museum for my use a further large collection of scientifically collected eggs from Nigeria, many of which have not previously been known or described. The collection was accompanied by first-rate field-notes, which greatly enhance its value. It was made chiefly in the neighbourhood of Ilorin. Mr. Shuel has recently been transferred to Kaduna, which is situated in very different country, with an entirely fresh fauna, so that we may expect to hear more from him in the next twelve months. It is hoped that the Rev. F. C. R. Jourdain will find time to write a report on Mr. Shuel's very valuable collection.

Mr. Austin Roberts, of the Transvaal Museum, whose field-work is recognized to be of a very high order, has been engaged since his return from the Vernay Kalahari Expedition on a trip to Zululand. I much regret that I have been unable to learn much about his expedition, but we may be sure that he made a success of it, and shall look forward to the published results.

Mr. L. S. Bradley has been collecting mammals and a few birds in Angola for the American Museum of Natural History. Angola is attracting American ornithologists, and is a field well worthy of attention from ourselves. It still remains rather a gap in our knowledge of Africa; it is a wonderfully healthy country, and I commend it to the attention of some of the younger members of this Club who may wish for scope for their energies.

Major Bagnold, in the course of another journey in the Lybian Desert, collected a certain number of birds which Mr. R. E. Moreau is studying from the point of view of the light they throw on migration.

Messrs. Wilfred Thesiger and David Haig-Thomas are engaged in an expedition to Abyssinia. They propose to survey the course of the Hawash River and as much of the surrounding country as possible, then to attempt to cross the intervening desert to Eritrea. They propose also to study the distribution of the tribes and big game, and to obtain

a specimen of the buffalo which is to be found by the river. Mr. Haig-Thomas will pay special attention to the birds. They have made a successful beginning, as we have just received at the British Museum several specimens of the Blue-winged Goose (*Cyanochen cyanopterus*), of which we previously had only two examples.

Of French expeditions to Africa, the Mission Griaule from Dakar to Djibouti takes precedence as the most important. Valuable bird collections were brought back, more particularly from the Gondar district of Abyssinia, characteristic of the avifauna of the Abyssinian plateau.

America.

As we might expect, this huge field is almost entirely occupied by Americans. I will very briefly mention some of their activities :—

Mr. Wharton Huber has been collecting birds and mammals in New Mexico for the Philadelphia Academy.

Mr. M. A. Carricker, of the same Academy, collected birds in Peru.

Mr. Robert T. Moore, well known for his studies on the Humming-Birds in South America, has been collecting birds in the highlands of Mexico during last April and May.

Mr. J. Stuart Rowley has made a collection of birds in Lower California.

While on the subject of America, I may mention that the large and important collection of birds in New England formed by the late Colonel J. E. Thayer has gone to the Museum of Comparative Zoology at Harvard, where it will be available for study.

West Indies.

Sir Charles Belcher is, I understand, continuing to make interesting observations on the birds of Trinidad, where he is now Chief Justice.

Mr. James Bond has been collecting in the West Indies on behalf of the Philadelphia Academy.

Falkland Islands.

Mr. J. E. Hamilton, Government Naturalist on the Falkland Islands, seconded to the 'Discovery' Investigation, was detached for special research on the Southern Sea-Lion (*Otaria byronica*) in the Falklands, and undertook a tour, lasting from 1929–1932, which entailed visiting almost every part of that colony. The results of his investigations will be published shortly in the 'Discovery' Reports. Mr. Hamilton took the opportunity presented to collect a number of birds, and the bulk of the 80 or 90 specimens received by the British Museum were secured by him. Special attention was paid to the Skuas, a series being collected, and Mr. Hamilton's report on these birds is in course of preparation. As Mr. Hamilton is shortly returning to the Falklands to continue his investigations, we shall look forward to hearing more about the birds of this far outpost of our Empire. While mentioning these islands I should like to draw attention to the good ornithological work which is being done there by Mr. A. G. Bennett, who has been resident in the Falklands for many years.

Pacific.

Our fellow member Mr. Herbert Stevens, during 1932 and the current year, has been working in the Morobe district of New Guinea in the interest of the Museum of Comparative Zoology, Harvard. He was in the field from January 1932 until May 1933, with headquarters at Wau. He had five camps at elevations between 2300 and 7000 feet, the last being on Mt. Misim (*circa* 9280 feet), in the Kuper Range, where he remained six months. The other camps refer to the valley of the Bulolo and the Upper Watut, where collections were made between the coast and a point 75 miles inland. The results came up to all expectations, and the fauna proved to be marvellously rich.

Two Americans—Mr. Richard Archbold, a former member of the Franco-British-American Expedition to Madagascar, and Dr. A. L. Rand—have been collecting in south-east New Guinea for the American Museum of Natural History.

I now turn to another branch of our subject—

Aviculture.

When glancing through the addresses of your past Chairmen in recent years I note that there has been no allusion to aviculture, although many of our members are aviculturalists of standing, and the President of the Avicultural Society—Mr. Ezra—has just been elected to your Committee. I do not intend to-night to give you a *résumé* of what is going on in that field, but I would draw your attention to one fact which I think merits your notice—there are no less than ten species of Birds-of-Paradise at the present time alive in the London Zoological Gardens. During the year the Society has received some very rare examples brought home by Mr. Shaw Mayer, and the species now on exhibition include *Seleucides nigricans*, *Astrarchia rothschildi*, *Paradisea augustæ-victoriæ*, *P. minor*, *P. gulielmi*, *Paradisornis rudolphi*, *Uranornis sanguinea*, *Semioptera wallacii*, *Parotia wahnesi*, and *Lophorhina superba minor*. The majority of these, Mr. Seth-Smith tells me, are now in full breeding plumage, and may frequently be seen performing their "display."

Another noteworthy achievement of the Zoological Society, for which Mr. D. Seth-Smith should be given great credit, has been the exhibition of a collection of some six species of Humming-Birds under conditions that not only show them to the best advantage, but apparently provide them with the necessities for health and happiness.

Though too numerous to mention, private members of the Avicultural Society are doing extraordinarily good work, and in some instances very rare species are being kept successfully and bred in confinement.

Literature.

Following the practice of the past, I shall now mention the principal books which have been published during the past twelve months. It is not usual in this address to include ornithological papers which have appeared in the numerous

scientific periodicals; lists of these are published quarterly in 'The Ibis' and in several foreign journals. There is one paper, however, which is of such importance that I should be failing in my duty if I did not draw particular attention to it. I refer to Dr. Percy Lowe's study "On the Primitive Characters of the Penguins and their Bearing on the Phylogeny of Birds," published in the 'Proceedings of the Zoological Society,' 1933, pp. 483–538.

It looks as if Dr. Lowe's researches into the question of the phylogeny of the Ostriches and Penguins will revolutionize our former ideas as to their origin and relations to the carinate flying division of birds. His recognition of the avian form of the metacarpus in such bipedal Dinosaurs as *Ornitholestes* seems to provide an answer to those who see in the osteology of this part of the fore-limb of the Ostrich and Penguin proof that they are descended from flying ancestors. His discovery, too, of the embryonic arrangement of the feathers in the wing of the Penguin makes it difficult to avoid agreeing with his conclusion that the Penguins represent a highly specialized branch descended directly from a generalized and primitive avian ancestor.

Books.

Baker, E. C. S.—'The Nidification of Birds of the Indian Empire,' vol. ii. (Will bring our knowledge of Indian Oology up to date, and prove a great asset to those who are interested in the birds of that region.)

Bolam, G.—'Catalogue of the Birds of Northumberland.'

Chapin, J. P.—'Birds of the Belgian Congo.' (A fine piece of work, which comes fully up to our expectations of the author. It will for long remain the standard work on the region covered. I reviewed it at length in the last July Ibis.)

Chislett, Ralph.—'Northward Ho! for Birds.' (An example of the highest photographic skill, and is a book which sets a standard for all bird-photographers to aim at.)

Cobb, A. F.—'Birds of the Falkland Islands.' (As the subtitle announces, is a "Record of Observation with the Camera in the Falklands.")

Groebbels, F.—'Der Vogel. Bau, Funktion, Lebenserscheinung, Einpassung,' vol. i. Berlin (Gebrüder Borntträger). (The first volume of an important monograph on the physiology of birds.)

Hartert, E., and Steinbacher, F.—'Die Vögel der paläarktischen Fauna,' Supplement, pt. ii. (This carries on the fine work which Drs. Hartert and Steinbacher have set themselves, *i. e.*, to bring up to date all the available information since the publication of Dr. Hartert's classic work.)

Heinroth, C. & M. — 'Die Vögel Mitteleuropas.' Ergänzungsband. Berlin (Hugo Bermühler), 1933. The supplementary volume to the well-known work.

Kuroda, N.—'Birds of the Island of Java,' vol. i. (A collation of all the published information on Javanese birds, fully illustrated in colour and written in English. An excellent piece of ground-work upon which future field-workers can build, and upon which the author deserves our warmest congratulations.)

Lambrecht, K.—'Handbuch der Palæornithologie.' Berlin (Gebrüder Borntträger), 1933. (A very complete monograph on avian palæontology. It is the most important work ever published on this subject, containing, as Dr. P. R. Lowe has assured us, "a complete and accurate up-to-date record of avian fossil remains," and is a full history of the science since its birth.)

La Touche, J. D.—'A Handbook of the Birds of Eastern China,' vol. ii. pt. ii. (Mr. La Touche continues his work on the birds of Eastern China, and we look forward to seeing its completion at an early date. The last part published deals with the Nightjars and Birds-of-Prey.)

Lowe, Dr. P. L.—"On the Primitive Characters of the Penguins and their Bearing on the Phylogeny of Birds."

Proc. Zool. Soc. 1933, pp. 483–538. (I have already drawn attention to Dr. Lowe's work on the Penguins in an earlier part of my address, *antea*, pp. 40–41.)

Lowe, Willoughby P.—'The Trail that is always New.' (Although this is a popular book, it contains much of interest to the ornithologist, for it is the narrative of the many expeditions which Mr. Lowe has undertaken to all parts of the world collecting birds for the British Museum. The author is a well-known member of this Club.)

Taka-Tsukasa, Prince.—'The Birds of Nippon,' vol. i. pt. ii. (This is a princely monograph indeed, written in English, and will remain the authoritative work on the birds of the Japanese Empire for many years to come.)

Yamashina, Marquis.—'Nippon no Chorui to Sono Seitai.' (A Natural History of Japanese Birds. In Japanese. Vol. i. pts. 2 and 3.)

Books in Preparation.

Of books in active preparation, I may perhaps be permitted to allude to my third volume of 'The Birds of Tropical West Africa,' which should be published at the end of this month. The letterpress has been in the hands of the printers since July last, but delay has been caused by some of the coloured plates refusing to dry. This volume completes my work on the non-passerine species.

Mr. W. L. Sclater's revision of Sir Frederick Jackson's volumes on 'The Birds of Kenya and Uganda' is making progress, but will not be issued until the whole work is complete.

We are still looking for Sir Geoffrey Archer's promised book on 'The Birds of Somaliland' and regret that the first volume of this work, commenced many years ago, is still delayed.

A work of considerable importance to African ornithologists, entitled 'An African Handbook of Birds,' has been undertaken by our Secretary, Mr. C. W. Mackworth-Praed, and Captain C. H. B. Grant. This will link up with the other regional treatises which have appeared, or are in course of preparation, on the birds of that continent. The area embraced joins up

with Meinertzhagen's 'Birds of Egypt,' Chapin's 'Birds of the Belgian Congo,' Belcher's 'Birds of Nyasaland,' and the area included in my own 'Birds of Tropical West Africa.'

Yet another book on African birds, now in the press, is Captain C. D. Priest's entirely revised and re-written 'Birds of Southern Rhodesia.' I have seen some of the proof-sheets of this work, and observe that it contains a mine of useful field information, besides being planned on a much better system than his previous volume on the same subject.

Messrs. C. Boden Kloss and F. N. Chasen have practically completed their work on the avifauna of the Malay Archipelago, continuing the volumes commenced by the late H. C. Robinson.

The Marquis Hachisuka is continuing his 'Birds of the Philippines,' the first volume of which I noticed last year. The third part, commencing volume ii., is now passing through the press.

Lastly, I must not forget to mention the second volume of Mr. J. Lee Peters's 'Check List of Birds of the World,' the proof-sheets of which are now being checked by various regional specialists.

Concluding Remarks.

In the concluding part of my address to you last year I stressed the importance of our members working hand in hand, whenever possible, with the Royal Geographical Society, and pointed to the fortunate fact that both the Honorary Secretaries of the R.G.S. were distinguished members of the B.O.U.

This year we may indeed congratulate ourselves, for not only do both the R.G.S. Honorary Secretaries remain in office, but the newly-elected President of the Royal Geographical Society is one of our most distinguished members, and a regular attendant at our meetings—Major-General Sir Percy Cox. I would take this opportunity not only of congratulating him on having been elected to that highly onerous position, but also the Royal Geographical Society for having made such an extraordinarily wise choice.

Before I conclude I would draw your attention to an aspect of ornithology to which we can none of us afford to turn a deaf ear. I refer to the protection of our African fauna—of course with particular reference to birds. Our Government have just concluded an important conference in London, to which many nations were invited to send delegates, with the object of arriving at some international agreement to save the fauna of Africa. I am glad to say that birds not only entered into their deliberations, but that a schedule has been drawn up of certain species which for one reason or another merit special protection. I am informed on good authority that the Conference has been extremely successful, and that a great step forward has been made. The membership of this Club contains the names of many distinguished naturalists and experienced collectors, and it is the duty of all of us—wherever we may be—to do all we can, individually and collectively, to put a stop to wasteful collecting and to throw our weight in with those who, at the invitation of our own Government, are striving to preserve for posterity the animals and birds that are threatened with extermination.

I do not for one moment advocate no more collecting, but I do urge upon you the necessity of collecting with more discrimination and with ever-increasing attention to the birds' habits and biology. Happily there are signs in our own ranks that such is being done.

Finally, Ladies and Gentlemen, I would express my thanks to those, both at home and abroad, who have assisted me in preparing this *résumé* of the year's work.

The Chairman then called on Mr. H. F. Witherby to make a statement about the disposal of his collection of birds to the British Museum :—

I am grateful (said Mr. Witherby) for being given this opportunity of saying something about my collection, and I trust my fellow members will bear with me if my explanation is to a large extent of a personal nature, as indeed it must be.

In the first place, Mr. Chairman, I must thank you very much for your very kind remarks. I greatly appreciate what you have said and shall always treasure your kind words. I feel that you have been too kind, because for a long time I have looked on my collection as belonging to ornithology, and am not, therefore, in my own view, making any pecuniary sacrifice.

I am not seeking to lay this down as a general principle. In the past many have presented their collections to museums, but many others have thought differently and have acted differently; it is a personal question, but I may, perhaps, be allowed to express a hope that some day my view may be general, and that scientific collections may be regarded as belonging to the science concerned.

If I may give a few more personal explanations, I should like to state that I have been collecting birds for over forty years. I have never collected merely for the sake of making a collection, but with the object of studying various questions. Chief of these have been moults and the sequence of plumages and geographical variations. Consequently I have always used and worked at my collection a great deal, but recently I have had to change my mode of life, and to do far less indoor work.

Some years ago, as Dr. Percy Lowe knows, I arranged to bequeath my collection to the British Museum (Natural History); but as I am not now using it fully I felt that I ought to make it more generally available at once.

The British Trust for Ornithology was then launched, and this seemed to me a great opportunity to make a double use of the collection by disposing of it by sale to the Trustees of the British Museum, where it would be of more use than I can now make of it, and where it could be used to develop and encourage systematic work in field ornithology—in other words, the biology of birds.

I think you must all agree that it is of the utmost importance that this essential side of ornithology shall be fully developed, and to this end a properly equipped centre for such work in this country is absolutely necessary.

To return to my collection. This consists of rather over 9000 skins of some twelve to thirteen hundred forms. It is entirely Palæarctic, and the main series are from the western side of the region; from the east there is the rest of my Persian and White Nile collections, part of which I gave to the Museum at the time; and there is a fine series of birds from the Yangste Kiang. These last, and a Mediterranean series, were collected by my old friend, Rear-Admiral H. Lynes, and I am happy to say he thoroughly approves of my present intention.

I take this opportunity of again thanking many other friends and correspondents for sending me birds and skins, and of expressing the hope that they will also approve of the arrangement.

I shall, of course, greatly miss my collection, and I could not continue to answer the numerous questions and puzzles constantly sent me in connection with birds on the British List without some skins to refer to. For this purpose the Museum authorities have very kindly arranged to allow me to retain on loan a small reference collection of British species.

As the Chairman has already stated, the amount I shall be handing over to the Trust is £1400, to form the nucleus of a permanent fund.

But this sum is obviously merely a nucleus, and I sincerely hope that it may attract many other larger and smaller gifts, so that we may build up a fund the income from which, added to current subscriptions and donations, will place the Trust in a sound position financially to carry out this research work.

It takes some time for new things to be well understood, and you will perhaps allow me to say before I sit down that the main objects of the Trust are :—

> To establish at or near Oxford an Institute to form a national centre of field-ornithology.
>
> To form an advisory committee of representative field-ornithologists to consider projects for research to be carried out through the Institute.

To form a chain of observers throughout the country to carry out programmes approved by this Committee.

Supposing we begin on only a very modest programme of work, and cut expenses to bare essentials. It is obvious that to carry out such work the Institute must be housed and equipped, and, however much voluntary help is given, there must be a certain whole-time staff, so that, whatever the minimum is, this sum must be a permanent yearly expense.

I have very carefully considered the project, and I see a great future for it. I have the firm belief that this organization, when it gets going, will be of the greatest possible value to British Ornithology. It deserves all possible support, and I am very glad that my collection has been the means of making a step towards its permanent foundation *.

Dr. Finn Salomonsen forwarded the following description of a new African Paradise Flycatcher :—

Tchitrea viridis restricta, subsp. nov.

Description.—Nearest to *T. v. viridis* (Müller) from Senegal and Gambia, but differing as follows :—*Males* : upper-parts and wing-coverts dark maroon, with a strong purplish gloss, in *viridis* chestnut; under-parts with a dark bluish gloss from chin to under tail-coverts, the latter being deep chestnut, strongly contrasting; in *viridis* the abdomen is more or less grey, but the under tail-coverts also chestnut, as in *restricta*; remiges black, in *viridis*—also in quite fresh specimens—brown or even light brown. *Females* : darker above than in *viridis*, but with only a slight purplish gloss; darker black or metallic below; primaries and secondaries black, in *viridis* brown. (One female has lost all pigment on the crown, which is pure white (normally glossy black), sharply contrasting with the maroon back. This is a mutant I have not seen in any other form of *Tchitrea*.)

* [For full details and text of the appeal to the public *vide* Bull. B. O. C. liii. 1933, pp. 198–199.—Ed.]

Measurements.—As in *T. v. viridis*, only tail in males longer. Eleven *viridis* measured: 140–250, one 284, one 317 mm. Four *restricta* measured: 255, 310, 327, 330 mm., the streamers in this last form thus being longer.

Material.—4 ♂♂, 3 ♀♀.

Distribution.—Restricted to Nkose, the southernmost of the Sese Islands in Victoria Nyanza.

Type.—In the British Museum. ♂ ad., coll. Capt. Pitman, Nkose Island, Victoria Nyanza, May 26, 1928. Brit. Mus, Reg. no. 1929.1.7.22.

Remarks.—*T. v. restricta* cannot be confounded with *T. v. ferreti* (Guérin), the breeding-area of which surrounds Victoria Nyanza (good series examined from Uganda, Tanganyika, Kenya, Ruwenzori). In this form the upper-parts are chestnut, the breast and abdomen greyish, only the throat glossy, the under tail-coverts grey, white or orange, never chestnut. Only *T. v. viridis* from Senegal and Gambia is similar to *T. v. restricta*, but is easily distinguished by its brown, not black, remiges, and duller, not so bright shining plumage throughout. In both forms, however, the white phase is entirely absent, but is commonly found in the two forms separating *restricta* and *viridis* (viz., *speciosa* (Cassin) in Congo and Cameroon, and *ferreti* (Guérin) in Uganda). Whereas *T. v. viridis* has always red streamers, three of the four males of *T. v. restricta* examined have one or both streamers white. On Ukerewe Island, in the southern part of Victoria Nyanza, occur typical *T. v. ferreti* (specimens from Berlin Museum), but a specimen from "Scesse Island" (probably Bugala), coll. Stuhlmann (in the Berlin Museum), is intermediate between *ferreti* and *restricta*, as might be expected; however, specimens from Entebbe are already typical *ferreti* (Col. Meinertzhagen's collection).

The development of this characteristic Flycatcher on Nkose Island is remarkable, as it is one of the very few birds known to be confined to an island in a freshwater lake*. Previously

* Prof. Stresemann kindly informs me that *Coliuspasser macroura conradsi* Berger, from Ukerewe Island, as well as *Phasianus colchicus bergii* Sarudny, from Lake Aral, both being good races, are other examples of birds restricted to freshwater islands.

an antelope has been described from Nkose (*Limnotragus spekei sylvestris* Meinertzhagen, P. Z. S. 1916, p. 380, the Nkose Sitatunga) differing considerably from the Bugala form.

Nkose is a small island, uninhabited by man, about 2000 yards long and 300 broad. Throughout its entire length it is covered with dense forest, which overhangs the water's edge (*cf.* Meinertzhagen, *t. c.* p. 379).

It is with profound regret that we have heard, since going to press, of the death of Dr. Ernst Hartert, which occurred on November 10, 1933. Dr. Hartert was a distinguished member of the Club since its inception in October 1892. His loss will be deeply felt by all of us and by Ornithologists throughout the world. A full obituary notice will be published later in 'The Ibis.'

NOTICES.

The next Meeting of the Club will be held on Wednesday, December 13, 1933, at the Knightsbridge Hotel, Knightsbridge, S.W. 1. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

1. Major R. W. G. Hingston will read a paper entitled "The Meaning of Animal Colour and Adornment."

2. Dr. G. Carmichael Low will give a short account of a trip to Shetland and the Orkneys.

3. Mr. N. B. Kinnear will exhibit a skin of the Blue-winged Goose (*Cyanochen cyanoptera*) from Abyssinia, and will show a photograph of a Parrot (*Psittacus erithacus*) in the Westminster Abbey Wax Works.

4. The Rev. F. C. R. Jourdain will exhibit an egg of *Puffinus puffinus mauretanicus* (erroneously announced in the Agenda in the last 'Bulletin' as *Puffinus puffinus yelkouan*), held over from last meeting.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXIII.

The three-hundred-and-sixty-eighth Meeting of the Club was held at the Knightsbridge Hotel, Knightsbridge, S.W. 1, on Wednesday, December 13, 1933.

Chairman: Mr. G. M. Mathews.

Members present:—Miss C. M. Acland; Dr. W. J. Adie; E. C. Stuart Baker; Miss P. Barclay-Smith; F. J. F. Barrington; P. F. Bunyard; Mrs. E. S. Charles; Hon. G. L. Charteris; H. P. O. Cleave; Maj.-Gen. Sir P. Z. Cox; R. H. Deane; Miss J. M. Ferrier; Miss E. M. Godman; Capt. C. H. B. Grant; Col. A. E. Hamerton; B. G. Harrison; Dr. J. M. Harrison; P. A. D. Hollom; Dr. E. Hopkinson; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; Bertram Lloyd; Dr. G. Carmichael Low (*Editor*); Dr. P. R. Lowe; Dr. N. S. Lucas; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*); J. G. Mavrogordato; J. L. Chaworth Musters; C. Oldham; B. B. Osmaston; Miss G. Rhodes; W. L. Sclater; D. Seth-Smith; Major A. G. L. Sladen; Marquess of Tavistock; Dr. A. Landsborough Thomson; B. W. Tucker; Miss E. L. Turner; E. E. Wishart; H. F. Witherby; C. G. M. de Worms.

Guest of the Club:—Major R. W. G. Hingston.

Guests :—Brig.-Gen. R. M. Betham ; Miss G. Bodkin ; R. H. Calvert ; F. Spencer Chapman ; Leslie B. Dyball ; Miss C. E. Godman ; Lt.-Commander A. M. Hughes ; P. I. Lake ; Col. F. P. Mackie ; Lt.-Col. R. F. Meiklejohn.

Before the Meeting started, the Chairman referred with regret to the death of Dr. Ernst Hartert, which was announced in the last number of the 'Bulletin.' All present stood in silence for a minute as a tribute to his memory.

The Meaning of Animal Colour and Adornment.

Major Hingston gave a brief account of his theory of animal colour, the full details of which have been published in his 'Meaning of Animal Colour and Adornment' (Arnold & Co. 18*s*.)

Major Hingston's view is that the conspicuous colours of animals do not function as a sex-attraction for the female, but are rather a fighting attire that functions during battle with the rival male. He illustrated this view by a number of examples. For instance, the lion is essentially a concealingly-coloured animal ; but this concealing colour is in three parts of the body, namely : (1) the mane, (2) the tail-tuft, (3) the back of the ears—replaced by brownish-black. Now when the lion threatens a rival lion he moves these three conspicuously coloured areas in a menacing manner. He (1) spreads the mane, (2) swishes the tail-tuft over his haunches, (3) rotates his ears so that their black surfaces look directly forward. Thus he exhibits blatantly before his enemy the whole of his conspicuous pattern. This exhibition has a threatening significance. The gesture is a demonstration of hostility to the rival, and the greater the intensity of the demonstration the more it will tend to overawe the rival. Thus the conspicuous colours have a threatening function. They accentuate and intensify the threatening gesture. Hence their function is to intimidate the enemy. Their use to the animal is similar in nature to the use of war-paint by the human savage.

Several other examples were given of this principle, which Major Hingston maintains is universal in Nature. Take,

for example, the wild goat and wild sheep. The goats carry beards: their allies, the sheep, have no beards. Beards must have the same meaning as manes; hence it should follow that the fighting attitude of goats must be such as will make display of the beard, while the sheep must fight in some different manner, and in such manner as would not display a beard. And such is the case. When goats fight, they rush at one another, but just before coming in contact they rear up on their hind legs, then throw their heads backwards and thrust their chins forward, after which they bring their horns together with a crash. Now it is obvious that this rising on the hind legs and thrusting forward of the chin results in each bringing his beard conspicuously in the face of his rival. When sheep fight there is no such manœuvre. They merely rush together on all fours and crash their horns together. But there is one exceptional goat, the Tahr, which, unlike other goats, carries no beard, and this goat does not fight like other goats, but fights on his four legs like a sheep. Also there is an exceptional sheep, the Urial, which, unlike other sheep, carries a beard, and this sheep does not fight on all fours like other sheep, but fights on his hind legs like a goat. All of which fits in exactly with the view that the beard is linked with the threatening behaviour of the animals.

The gnu is a further example. This animal carries no less than five of these tufts: (1) a neck-crest, (2) a face-tuft, (3) a beard, (4) a tail-tuft, (5) a tuft between the front legs. This is a more complicated arrangement than exists in any other mammal. It should follow that the gnu's threatening behaviour is in some way specially complicated. Disturb a herd and you will see the complication. At one moment an animal will stare at you like a statue: he is showing the threat-tuft on his face. At another moment he thrusts down his head to the soil: he is exhibiting his threatening neck-crest. At another moment up goes his head into the air: he is displaying his beard after the manner of the goat. At another moment he flourishes his tail over his haunches: he is showing the menacing tail-brush. Lastly, he throws himself up on his fore-feet—a threatening attitude unique amongst mammals

he is exhibiting the tuft between his front legs—a threat-tuft which he alone amongst mammals possesses.

The same principle is applicable to birds. Major Hingston maintained that wherever he was acquainted with the hostile behaviour of a bird before its rival, that behaviour was of such a character as to exhibit before the rival such bright colour or elaborate plumes as that bird possessed. He gave the following as a few examples. Birds with conspicuous crowns, such as the Blackcap, lower their heads to near the level of the tail when threatening, and elevate the conspicuous crown-feathers. The Sandwich-Tern and the Black-billed Cuckoo were mentioned as illustrations. On the other hand, birds with bright-coloured breasts turn their beaks upward and puff out their breasts before their rivals. The Robin and cock Sparrow are common examples. Birds with conspicuous collars strike a different fighting attitude. They crane their necks straight forward and open wide the circular ruff. The Great Crested Grebe and the Ruff were given as illustrations. Birds with bright patches on the *outer surface* of the wings, such as the Magpie, strike a battle-attitude with wings widely spread and the *outer surface* exposed to the enemy. On the other hand, birds with conspicuous patches on the *under-wing surface* strike an attitude with the wings so spread that the *under surfaces* are exhibited to the enemy.

Major Hingston gave many more examples to indicate what he asserts is a universal rule, namely, that the hostile behaviour of all animals is correlated intimately with their patterns of colour; and the correlation is such that the conspicuous element in the colour-pattern is exhibited most blatantly before the rival. And, if that is true, he maintains that there is only one conclusion, namely, that the colour-pattern is linked with the hostile behaviour, and, if so, then the display of colour must be a part of this behaviour; and since the behaviour is intended to threaten the rival, then the colour too must have a threatening function. The colour is not to make the male look beautiful in the eyes of the female, but rather to make him look terrible in the eyes of the rival male.

This view throws light on several other problems. Take the difference between the sexes. Why are the males more brightly coloured than the females? If bright colour has a threatening function then the reason is obvious. It is because the males fight more savagely than the females, and, therefore, need a more elaborate threatening-machinery. The males are more brightly coloured for the same reason that they have large horns, tusks, and spurs. For bright colour has the same hostile meaning as the physical weapons. Both come into use at time of battle; hence both are specially required by the males.

Or take the moult. Why should the conspicuous colour of summer change into the dull colour of winter? Because the bird in these two seasons is in two different emotional states. In summer it is an aggressive bird—has to fight in defence of territory and nest; in winter it is a timid bird that commonly collects in peaceful flocks. If bright colour is linked with hostile temperament, then there will have to be a change in colour in harmony with change in temperament: hence two moults must occur. The bird fights throughout the summer in a bright-coloured uniform, without which it would be unable to do battle with its rival. In autumn its fighting spirit declines: hence the fighting uniform is no longer needed. It is now a peaceful bird: hence it puts on the concealing uniform of winter. When spring comes round, its hostile nature again develops; without conspicuous colour it cannot express that hostility: hence it resumes the conspicuous coat.

Major Hingston also showed how this view threw a new light on courtship behaviour. Readers who are interested in the subject are advised to consult his book.

The Marquess of Tavistock, Mr. Stuart Baker, Mr. D. Seth-Smith, Mr. B. W. Tucker, and others discussed and criticized Major Hingston's paper.

The Rev. F. C. R. Jourdain, who also spoke, remarked that boldly contrasted markings on a uniformly coloured mammal would tend to break up the outline, and so render it less conspicuous, and not more prominent. That in the case of ornamental appendages (with one or two possible

exceptions) none of them had any value as part of the "fighting machinery"; also that the courtship display in birds was more fully developed than the display prior to fighting, and it seemed reasonable to suppose that the partial display to impress the rival male had originated in that developed to stimulate the female rather than *vice versa*.

Dr. G. Carmichael Low gave a short account of a visit to Shetland and Orkney during August 1933. He said:—

Mr. A. Holte Macpherson and myself left King's Cross on Saturday, August 5, at 10 A.M., by the 'Flying Scotsman,' and arrived at Broughty Ferry, Scotland, that evening. We spent Sunday and Monday morning looking at Waders on the river Tay; the Bar-tailed Godwits and other migrants were just beginning to arrive. In the afternoon we continued our journey to Aberdeen, where we set sail at 11 P.M. that evening for Shetland.

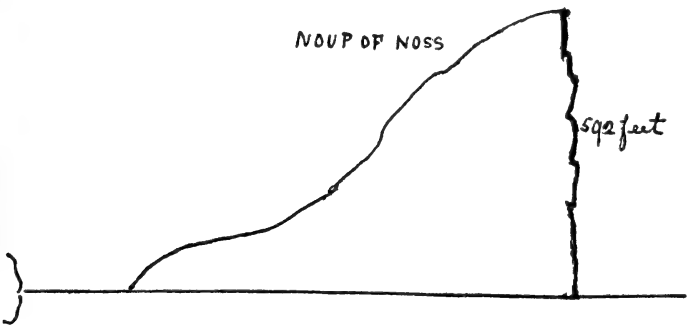
The weather was perfect, with a beautiful sunset, but in the early hours of the following day we encountered a tremendous gale of such strength that none of us moved out of our bunks until 4.30 in the afternoon, when the vessel got into the lee of Sumburgh Head, the southernmost point of Shetland. Lerwick, was reached after 6 P.M., some four hours late.

Shetland, or Zetland as it used to be called, is an archipelago of some hundred odd islands and rocks. Lerwick, the capital, is situated on the east side of Mainland, on the Sound of Bressay, this dividing it from that island. The most important of the islands are Mainland, Yell, Fetlar, Unst, Foula, Bressay, Whalsey, Hascosay, and Noss. They lie just north of latitude 60°, the same as Bergen, and the Faroes and Iceland are to the north-west of them. They are very bleak, barren, and hilly, with wonderful cliffs, the hills either being bare and stony or covered with short heather, dwarf juniper, or grass. Arms of the sea called "Voes" penetrate the islands in all directions. There are no trees, and the animals—ponies, collie dogs, sheep, and cattle—are small and stunted. Passerine birds are scanty, there are no Grouse, Pheasants, or Partridges, but sea-birds exist in countless numbers. The weather as a rule

is bad, gales sweeping the country in summer as well as in winter, with heavy rains. The climate, however, is mild, owing to the Gulf Stream. The agriculture is primitive; fishing, especially for herring, constitutes the principal industry of the country.

Our first ornithological visit was to Noss, the small island lying to the east of Bressay, and separated from it by a narrow sea-channel. We crossed the Sound of Bressay in the ferry-boat (a life-boat of the old 'Oceanic,' which was torpedoed in the War), then walked across Bressay, some two miles, to its eastern side, where we were rowed across the channel by one of the watcher's daughters. Jameson, the watcher, lives on the only house on the island, and keeps sheep. The

Fig. 1.



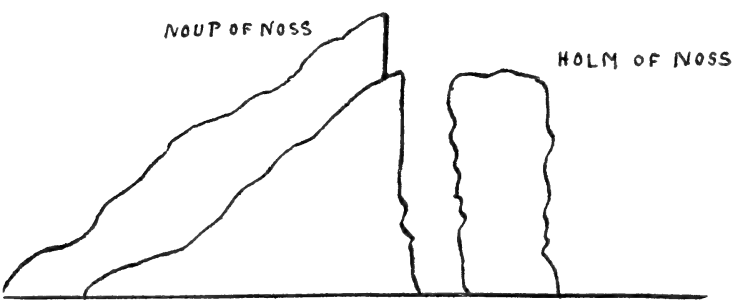
island is small and covered with short grass, on which the sheep and numerous rabbits feed. From sea-level the ground gradually rises by an easy slope to a summit (the Noup of Noss); then, as if the hill had been cut sheer through by an enormous knife, it drops straight down into the sea, forming a cliff or precipice nearly 600 feet in height (fig. 1).

Innumerable birds inhabit this wonderful island. On the slopes the Great Skua (*Catharacta s. skua*) and Richardson's, or the Arctic, Skua (*Stercorarius parasiticus*) breed in large numbers. On the cliffs Ravens (*Corvus c. corax*), Cormorants (*Phalacrocorax c. carbo*), Shags (*Phalacrocorax a. aristotelis*), Gannets (*Sula bassana*), Herring-Gulls (*Larus a. argentatus*),

Greater Black-backed Gulls (*Larus marinus*), Kittiwakes (*Rissa t. tridactyla*), Northern Guillemots (*Uria a. aalge*), Black Guillemots (*Uria g. grylle*), and Puffins (*Fratercula arctica grabæ*) were nesting, or rather had nested, in enormous numbers, and had not yet left. There were also Fulmar Petrels (*Fulmarus g. glacialis*), and a few Storm-Petrels (*Hydrobates pelagicus*) are said to nest there also. Peregrines used to nest on the main cliff, but have not done so for some years now.

On the grassy top of the Holm of Noss, a stack of rock separated from the cliff of the island by a chasm through which the sea passes (fig. 2), a colony of 500 Greater Black-backed Gulls nest. Common Gulls (*Larus c. canus*), Lesser

Fig. 2.



Black-backed Gulls (*Larus fuscus graellsii*), Black-headed Gulls (*Larus r. ridibundus*), Arctic Terns (*Sterna macrura*), and Common Terns (*Sterna h. hirundo*) were also seen flying about the channel between the two islands.

Of Passerine birds there were Ravens (*Corvus c. corax*), Hooded Crows (*Corvus c. cornix*), Shetland Starlings (*Sturnus vulgaris zetlandicus*), House-Sparrows (*Passer domesticus*), Twites (*Acanthis f. flavirostris*), Corn-Buntings (*Emberiza c. calandra*), Sky-Larks (*Alauda a. arvensis*), Meadow-Pipits (*Anthus pratensis*), Rock-Pipits (*Anthus spinoletta petrosus*), Wheatears (*Œnanthe œ. œnanthe*), and Shetland Wrens (*Troglodytes troglodytes zetlandicus*), the last-named inhabiting the cracks and crevices of the stone walls which are built on the

top of the cliffs to prevent the sheep from falling over into the sea. The day was perfect, warm and pleasant, with bright sun all day.

A visit to the Loch of Spiggie on Mainland, where the Red-necked Phalarope (*Phalaropus lobatus*) breeds, was not very productive, as the birds had just left their nesting-quarters ; one was seen, however, a young bird.

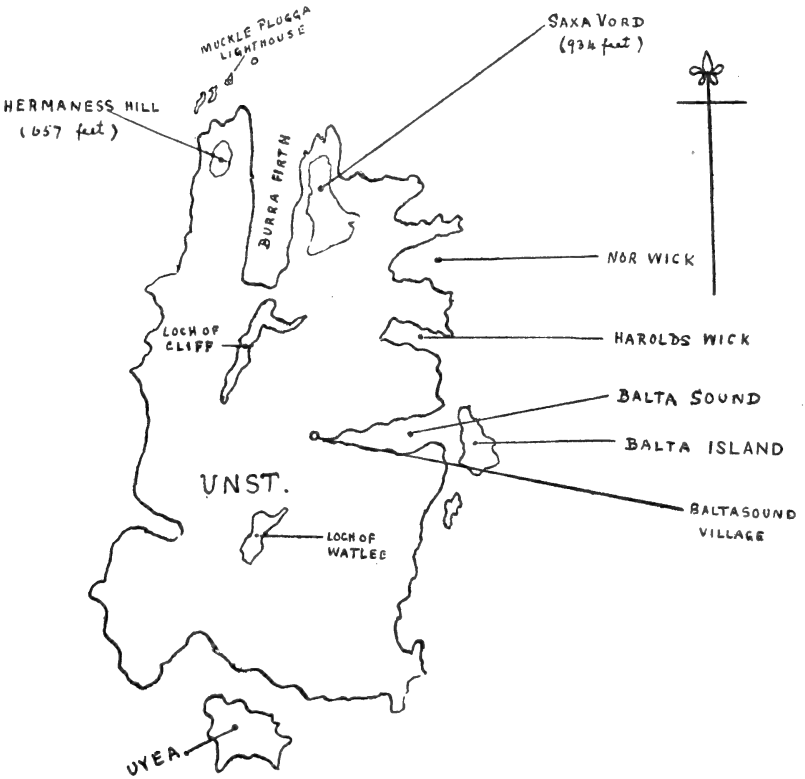
On Friday morning, August 11, we left Lerwick for the north, travelling in a small steamer called the ' Earl of Zetland.' On the way we stopped at Whalsey, Yell, Mid Yell (opposite the island of Hascosay), Fetlar, south end of Unst, between it and Uyea, and finally reached Balta Sound, on the east side of Unst, at 7 P.M. (fig. 3). The village of a few houses lies at the head of the Sound, a nice sea inlet, with its mouth well protected by Balta Island. On the journey, besides the ordinary sea-birds, we saw our first Red-throated Divers (*Colymbus stellatus*), many Eider-Ducks (*Somateria m. mollissima*), Skuas of both sorts on and around Hascosay, a Red-breasted Merganser (*Mergus serrator*), with eight young, in Balta Sound, and on the mud at the head of the Sound Redshank (*Tringa t. totanus*), Iceland Redshank (*Tringa t. robusta*), Curlew (*Numenius arquata*), Knot (*Calidris c. canutus*), Dunlin (*Calidris a. alpina*), Ringed Plover (*Charadrius hiaticula*), and Green Plover (*Vanellus vanellus*). The Hotel Nord, which commands a fine view of the Sound, afforded us accommodation.

Not far from here is Halligarth, where Dr. Edmonston lived, and after him his son-in-law, Dr. Saxby, author of ' The Birds of Shetland ' (1874), the standard work on the subject, a knowledgeable and most readable work. By the house is a small grove of sycamore trees (*Acer pseudo-platanus*), which was planted to attract Warblers and other birds. It is now known as Dr. Saxby's grove, and the present Dr. Saxby, a son, who now resides there, showed us a Thrush's nest in it and another in the garden—a rare event for Unst.

Unst ends in two massive headlands, Saxa Vord and Hermaness, the Burra Firth, an arm of the sea, dividing them (fig. 3).

We spent Saturday, August 12, on Hermaness, and inspected this famous breeding ground of the Great Skua. The ground rises up a long slope of a mile or more in length to the top of Hermaness Hill, after which it drops a little, and then, in a similar way to Noss, falls sheer into the sea. Standing

Fig. 3.



here one sees below one several masses of rock rising out of the sea, and on one of these, Muckle Flugga, there is a lighthouse. This is the northernmost part of the British Isles. The cliffs here, and to the west, were literally teeming with birds. There were five definite colonies of Gannets (*Sula bassana*), countless Guillemots (*Uria a. aalge*), Kittiwakes

(*Rissa t. tridactyla*), Puffins (*Fratercula arctica grabæ*),—not in thousands, but in millions,—Cormorants (*Phalacrocorax c. carbo*), Shags (*Phalacrocorax a. aristotelis*), with a few Razorbills (*Alca torda*) and Fulmar Petrels (*Fulmarus g. glacialis*). The watcher also showed us a slope covered with huge loose boulders where the Storm-Petrels (*Hydrobates pelagicus*) nest. While walking along the top of the cliff a group of eleven Ravens rose. We could not see why they had collected, but it was probably for a dead sheep, which had perished by falling over the cliff.

The Great Skua (*Catharacta s. skua*) and Richardson's Skua (*Stercorarius parasiticus*) nest on the slope of the headland in large numbers. Some of the Great Skuas still had young ones unable to fly, and now and then the parents birds would approach us and make a sudden dive at our heads, passing within a foot or so, and then swinging up into the air again. They do not actually strike one, at least none struck us, but Richardson's sometimes do, and would inflict an unpleasant wound if one were bare-headed. On the slope were some small tarns, and on one of these a pair of Red-throated Divers (*Colymbus stellatus*) nested and brought up two young, but one of these had died. We saw the remaining one swimming about in the tarn within about ten feet of us. Before the Divers took possession of the Tarn the Skuas used to resort to it for washing every day, but after several submarine torpedo attacks on them by the newcomers they left it severely alone. A Red-necked Phalarope had been on another small tarn the day before, but we did not see it. The watcher told us that an Eider had nested right among the Skuas and had brought off eight young ones.

Our next trip was to the Loch of Cliff and the hills to the west of this, and here we saw a pair of breeding Whimbrel (*Numenius ph. phæopus*), and on Heimar Loch a Red-throated Diver (*Colymbus stellatus*).

The journey south was similar to that going north, with the exception that we visited the Out Skerries, a rocky stack of islands lying sixteen miles to the east of the main group. Here we saw a large colony of Arctic Terns (*Sterna macrura*) and several Turnstones (*Arenaria i. interpres*).

Further visits to Bressay, including Bard Head and the Ord, magnificent headlands with precipitous cliffs, and to a series of lochs west of Walls, where we saw plenty of Red-throated Divers and nesting-grounds of Terns and Gulls, completed our visit to Shetland. Unfortunately we had not the time or opportunity to visit Foula, but we got some fine views of it on several occasions.

We saw fifty-three species in all, perhaps the most interesting being the Skuas, the Fulmar Petrels, which are everywhere now, the Black Guillemots, and the Red-throated Divers. Twites, Corn-Buntings, Meadow-Pipits, and Wheatears, both Common and Greenland, were all very common amongst the Passerines. One Peregrine (*Falco p. peregrinus*) only was seen.

The status of the Great Skua (*Catharacta s. skua*) in Shetland, in view of the serious indictment made against it by the Rev. F. C. R. Jourdain at the Meeting of the Club on April 12, 1933 (Bull. B. O. C. lii. 1933, p. 168), was specially studied by us on the spot, and the observations we made are as follows :—

1. The species (as also Richardson's Skua) is now very prevalent on many of the islands in the Shetland group.

2. There was no evidence obtainable, however, to say that the bird had become an absolute pest. Most of the breeding-grounds are on barren hills where life of other sorts is scarce.

3. It has already been stated that a Red-throated Diver and an Eider-Duck bred in the midst of the great colony on Hermaness and brought up young safely. A pair of Whimbrels were also breeding quite near, and by their behaviour evidently had young.

4. Jameson, the watcher on Noss, who keeps chickens and ducks in close proximity to the breeding-grounds there, definitely said he had never lost a single bird.

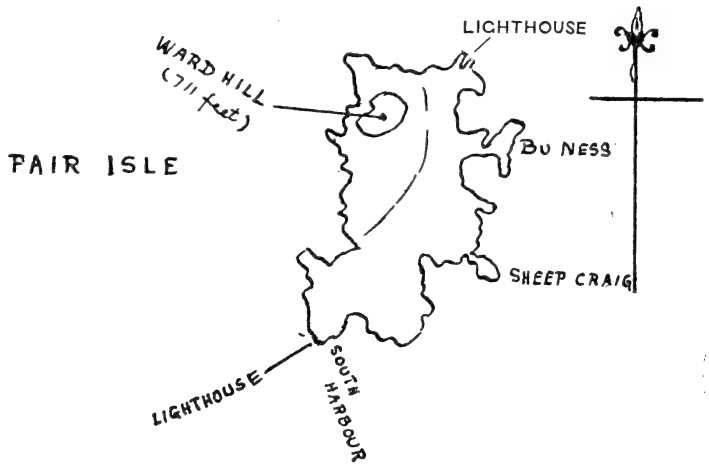
5. No one, at least amongst those we cross-examined, had ever heard of a Skua killing or even attacking a lamb. Occasionally Ravens or Hooded Crows attack weakly lambs and kill them by pecking their eyes out, and it is just possible

that a Skua might have been seen feeding on such a carcase, but even that is doubtful.

6. The Great Skua kills young Kittiwakes and possibly the young of Terns and other Gulls. Of this there is no question, but as these species are present in thousands little harm is done.

7. The removal of official protection from all areas with the exception of Hermaness has had no effect this season (1933), nor is it likely that it will be specially detrimental in the future, as there are places, like Foula and Noss, where protection, thanks to the owners of these islands, will still go on. Its effect, however, will require to be carefully watched in the years to come.

Fig. 4.



We left for Orkney on Friday morning, August 18, at 4 A.M., with the South cone hoisted for another gale, and we quickly ran into this on leaving the Sound of Bressay. The seas were even more mountainous than those encountered on our northern journey. Fair Isle—a small island some three miles long by one broad—which lies twenty-four miles south of Sumburgh Head and twenty-six miles north of North Ronaldsay (fig. 4), was passed about 8 A.M.

There are fine bold cliffs all round the island, except at its southern extremity. One especially stands out on the east side, the Sheep Craig. The hills in the interior rise to some height, Ward Hill (711 feet) in the north-west being the highest. The island has been rendered famous by the studies on bird-migration carried out there by Eagle Clarke from 1905–1911. He termed it the British Heligoland, and many rare birds, some first records for the British Isles, have been obtained there. On his first two visits he was accompanied by Mr. Norman B. Kinnear—our late Editor—who rendered valuable assistance.

As we got into the lee of the Orkney Islands the sea moderated, but we were two hours late in arriving at Kirkwall, which we made our headquarters.

The archipelago of islands, some seventy in number, which make up the Orkneys is quite different from that of Shetland. The main islands are Pomona, or the Mainland, Hoy, Rousay, Westray, Papa Westray, Eday, North Ronaldsay, Sanday, Stronsay, and Shapinsay. With the exception of Hoy, which is mountainous, with high cliffs at the north end, the other islands, though some have fair-sized hills, are mostly flat, especially Sanday and North Ronaldsay. There are a few trees, good heather on the hills, quite good agriculture, oats, turnips, etc., and some excellent cattle are now raised there. Grouse are fairly abundant and a few introduced Pheasants, but no Partridges. There are better shores and sand for Waders than in Shetland, and small Passerines are much more numerous. We saw seventy-seven species of birds in Orkney as against fifty-three in Shetland. Black Guillemots (*Uria g. grylle*) were very common, and Fulmars (*Fulmarus g. glacialis*) and other sea-birds also abounded, though not in such numbers as further north. Two days were spent on the hills round Finstown looking for Hen-Harriers (*Circus c. cyaneus*), but here our luck was out and we did not see them. Merlins (*Falco columbarius æsalon*) were fairly common in both groups of islands.

After that we went to Sanday, the voyage being a somewhat protracted one, as the steamer went first to the north, passing

Rousay, Veira, Egilsay, Westray, Papa Westray, Eday (through the Calf Sound with good cliffs), then through Eday Sound, and round from there to Bea Ness in Sanday, where there is a small hotel at which we put up. On Bea Loch, close by, we saw a Whooper-Swan (*Cygnus cygnus*) and eight species of Duck—Sheld-Duck (*Tadorna tadorna*), Mallard (*Anas platyrhynchos*), Teal (*Anas c. crecca*), Wigeon (*Anas penelope*), Shoveler (*Spatula clypeata*), Pochard (*Nyroca f. ferina*), Tufted (*Nyroca fuligula*), and Golden-eye (*Bucephala c. clangula*). Next day we visited the north end of the island, but found many of the lochs which we proposed to study dried up owing to the drought. The summer in Orkney, as elsewhere, had been a magnificent one, and the harvest was said to be the earliest in living memory. We had a good view of North Ronaldsay, famous as the island where Lieut.-Colonel Eardley Todd got the Red-headed Bunting (*Emberiza icterica*) (Bull. B. O. C. lii. 1932, pp. 20–21), and on the shore we saw many Redshank (*Tringa t. totanus*), Bar-tailed Godwit (*Limosa l. lapponica*), Curlew (*Numenius a. arquata*), Whimbrel (*Numenius ph. phæopus*), Dunlin (*Calidris a. alpina*), Sanderling (*Crocethia alba*), Golden Plover (*Pluvialis apricaria altifrons*), just arrived, and Ringed Plover (*Charadrius h. hiaticula*). Purple Sandpipers (*Calidris m. maritima*), very common both in Shetland and Orkney in winter, had not arrived yet (October is their month), and no Black-tailed Godwits (*Limosa l. limosa*) were seen. The Red-necked Phalarope (*Phalaropus lobatus*) did not nest on the island this year. Two pairs passed by in Spring, but evidently passed on to North Ronaldsay, where a colony nests.

Our return voyage to Aberdeen was uneventful, this time the weather being fine. On our way south we stopped again at Broughty Ferry for further observations on the Tay. Many more birds had come since our visit on the way north. There were hundreds of Bar-tailed Godwits (*Limosa l. lapponica*) now, thousands of Eiders (*Somateria m. mollissima*), Common Scoters (*Melanitta n. nigra*), and Velvet Scoters (*Melanitta f. fusca*) in St. Andrew's Bay, with all the other common Waders in addition. Worthy of note were Grey

Plovers (*Squatarola s. squatarola*), Golden Plovers (*Pluvialis a. apricaria*), Oyster-catchers (*Hæmatopus o. ostralegus*) in hundreds, and Sandwich Terns (*Sterna s. sandvicensis*). Seals also were numerous, sixty being counted on a bank at the mouth of the river.

Mr. Macpherson then left for the South at the end of August, but I stayed on till September 6, and had some further days on the river and three visits to Morton Lochs, two artificial pieces of water on Tents Moor, near Tayport, which were made some years ago by Mr. Christie, the proprietor of the ground. These are famous as giving the first record of the Broad-billed Sandpiper (*Limicola f. falcinellus*) for Scotland (Berry, Scott. Nat. 1912, pp. 212–213), and a Dusky Redshank (*Tringa erythropus*) has also been reported from there (Berry, Scott. Nat. 1928, p. 133).

The ponds were very dry owing to the drought, which also prevailed here, so there was good mud for Waders. I was fortunate in seeing on my first visit (August 31, 1933) a Wood-Sandpiper (*Tringa glareola*), a Green Sandpiper (*Tringa ochrophus*), two Curlew-Sandpipers (*Calidris testacea*), Sheld-Duck (*Tadorna tadorna*), Mallard (*Anas platyrhynchos*), Teal (*Anas c. crecca*), Tufted Duck (*Nyroca fuligula*), and also, a thing I do not remember having noticed before, several Snipe (*Capella g. gallinago*) resting out in the open on the mud at the edge of the water.

A second visit (September 2, 1933) added a Pink-footed Goose (*Anser brachyrhynchus*), an early arrival, Wigeon (*Anas penelope*), Shoveler (*Spatula clypeata*), and Scaup (*Nyroca m. marila*).

London was reached again on the night of September 6, 1933, and thus ended a delightful and interesting trip, during which the weather, apart from the gales round Shetland, was warm, sunny, and perfect, with practically no rain all the time.

Mr. N. B. Kinnear exhibited photographs of a Grey West African Parrot (*Psittacus erithacus erithacus*) from the Wax-works at Westminster Abbey, and made the following remarks :—

Some months ago the cases containing the wax effigies in Westminster Abbey were opened and the contents removed

for cleaning. The stuffed Parrot, the photo of which is exhibited, was sent to the Museum to be cleaned.

This Parrot, an example of the Grey West African Parrot, *Psittacus erithacus erithacus*, was in a case along with the effigy of Frances Stuart, Duchess of Richmond and Lennox. According to tradition she had the bird for forty years, and it only survived her death, on October 15, 1702, by a few days.

In spite of its great age the specimen has faded very little, and compares very favourably with an old skin in the collection formerly mounted in the gallery. The skin is mounted on a wooden manakin ; there are no wires up the legs, but the body is supported by a wire passing through the perch. The eyes were of glass, painted on both sides.

This is probably the oldest mounted bird in this country. We have no mounted specimens in the Museum older than the Pennant Collection, and these are set up with soft bodies and leg-wires. In regard to the age to which the bird is said to have lived, I may add that Major Flower accepts a record of Gurney's for 50 years, and records another of 41 or 42 years.

Mr. Kinnear also exhibited the skin of a Blue-winged Abyssinian Goose, *Cyanochen cyanopterus*, and remarked :—

This specimen, along with six others, was collected by Mr. David Haig-Thomas, who accompanied Mr. Thesiger on an expedition to explore the Hawash Valley, at Mulu, 23 miles north-west of Addis Ababa, on September 24–26 of this year.

The Blue-winged Goose was first described by Rüppell, Syst. Uebers. Vög. Nord-Ost Africa's, 1845, p. 129, from an example collected in the Shoa district, and even now is not a common bird in collections. In the British Museum there were only three specimens from Sir William Harris's expedition to Abyssinia in 1841, one female collected by Dr. Roth at Angolola in October 1841, and one male and one unsexed specimen collected by Harris himself in May 1842. The female bird shot in October has the wing in full moult.

This Goose appears to be not uncommon in the country where it occurs, and ranges from a little north of Addis Ababa to the Tigri and Agamè country, and from the Semien

district in the west to Lake Ashangi in the east. It is said to inhabit the high table-lands from 8000 to 12,000 feet. Salvadori described in the 'Catalogue of Birds in the British Museum,' xxvii. p. 140, a chick in down in the Genoa Museum which had been collected by Antinori at Tuor-Hamesh, in Southern Shoa, on September 15, 1877. Blaauw has given an account in 'The Ibis,' 1927, pp. 422–424, of the breeding of this Goose in captivity, and states that the eggs were laid in the end of June and the goslings hatched at the end of August. He also remarks on the curious carriage of this Goose, which is well illustrated in a photograph.

Very little has been published on the habits of this bird, and we hope that Mr. Haig-Thomas has made some observations. The measurements of the seven specimens are as follows :—

	Wing.	Tarsus.	Bill from feathers.
2 ♂♂	338–376	63·5–65	31 mm.
5 ♀♀	325–341	61–64·2	29–31 mm.

The Rev. F. C. R. Jourdain exhibited an egg of *Puffinus puffinus mauretanicus*. He stated that nearly 30 specimens of Shearwaters had been recorded off the British coasts, generally from the southern or eastern side, from August onward, which were formerly ascribed to the Levantine race, *Puffinus p. yelkouan* (Acerbi), but Dr. P. R. Lowe, in the Bull. B. O. C. xli. 1921, p. 140, showed that the western Mediterranean race was distinguishable from the eastern race (*yelkouan*), and named it *Puffinus puffinus mauretanicus*. The distribution, based on specimens in the British Museum, was given as "Algeria, Malaga, and Devonshire," but of course this includes the migration as well as the breeding range. This was in 1921, and since then Mr. H. F. Witherby has investigated the British records and examined 12 out of 28 ('British Birds,' xv. 1921, pp. 151–153), all of which proved to be *mauretanicus*. Six others also were identified from descriptions as of this form. No specimen of *yelkouan* has been identified from British seas, but all the eggs in British collections belong to this race. The breeding-grounds of

P. p. mauretanicus were surmised to be in the western Mediterranean, and Dr. Lowe suggested the isles of Alboran and Habbas, but no evidence was available on this point until quite recently. Meantime it has been ascertained that the migration range of *mauretanicus* extends to Denmark (Schiøler) and Norway. On the other hand M. Noël Mayaud has shown that the Shearwaters of Riou (near Marseilles) belong to *yelkouan*. There is one specimen from Corsica in the British Museum, obtained by Whitehead, which I have also examined, and this too can only be ascribed to *yelkouan*.

In 1931 Dr. Ticehurst and Mr. Whistler were in the Pityusæ Isles, and I happened to meet them on Formentera in that year. They had just visited a colony of Shearwaters and obtained specimens (including young in down) which were obviously *mauretanicus*. They were too late for eggs, and on the following day, at another locality on the same islands, I found burrows from which the young had flown and fragments of eggs.

The egg, however, still remained unknown until this year, when a fisherman brought one to my friend Capt. P. W. Munn. He visited a colony on the island of Conejera on May 15, 1933. Although most, if not all, of the young had already flown, he was fortunate in finding one egg which was stale and either infertile or deserted. This is the egg exhibited to-night. It measures 62·3×44·2 mm. and the surface is smooth, but only slightly glossy, with numerous pores. The markings are, I think, only nest-stains.

Dr. Percy R. Lowe exhibited a nestling chick of Pallas's Sand-Grouse (*Syrrhaptes paradoxus*). He said this chick had recently been presented to the British Museum by Mr. J. M. Chadwick, whose father, Major Chadwick, with his keeper, Alexander Scott, and a spaniel, found it at Binsness, on the Culbin Sands in Morayshire, on August 8, 1889. This was the first record of the taking of a chick of Pallas's Sand-Grouse which had been bred in the British Isles.

The chick had been taken (by the spaniel) close to the place where the year before, at the end of June (that is to

say, the year of the great irruption of 1888), the same keeper with the same dog had seen some newly-hatched chicks of the Sand-Grouse. At that time the sand-hills of Moray were frequented by companies of from two to three hundred Pallas's Sand-Grouse.

The chick was sent off alive to Professor Newton at Cambridge, but was dead when it reached him. He wrote a full description of its plumage, and got Mr. Frohawk to make a coloured drawing of it, the bird having been sent from Cambridge to London for this purpose.

Mr. Frohawk, having drawn the bird (*vide* Ibis, 1890, pl. vii.), it was then sent to Cullingford, of Durham, to skin and mount. After this it was exhibited by Professor Newton at the British Association meeting held that autumn at Newcastle-on-Tyne, and finally returned to Major Chadwick, who kept it mounted in a glass case until his death, when it passed to his son.

It will be remembered that the 1888–9 invasion of Sand-Grouse was on a larger scale than any of which we have previous records.

Dr. Lowe also exhibited a specimen of the Hottentot Teal (*Anas punctata* Burchell), which had been shot in Nigeria.

The skin had been sent to the Editor of 'The Field' by Mr. S. A. S. Leslie, who had bagged the duck, along with another specimen, at Hadegia, in Kano Province, Northern Nigeria. Mr. Leslie's letter to the Editor of 'The Field' is dated November 5, 1933, and he says that he shot the birds "recently." We may therefore presume that they were shot in the autumnal rainy season.

This makes the second record of the Hottentot Teal having been found in Nigeria, or, for that matter, in West Africa. The first record was based upon a feather taken from a duck and sent to Mr. David Bannerman for identification by Mr. W. G. Smith, of the Nigerian Political Service, in Bornu Province. Mr. Smith, at the same time, wrote a full description of the strange duck he had shot, and from which he

took the feather. Mr. David Bannerman had no doubt at all as to the identity of the duck, and recorded its occurrence in 'The Ibis,' for 1931, p. 99.

These records are interesting, for the previously recognized area of distribution of the Hottentot Teal is South and East Africa, its extension northwards on the east coast reaching as far as Shoa in Abyssinia, and on the west coast as far as Angola.

James P. Chapin, in his "Birds of the Belgian Congo," Bull. Amer. Mus. Nat. Hist. lxv. 1932, p. 501, says it is found in the highlands near Lake Kivu, and that Dr. Phillips secured specimens on Lake Bunyoni, British Ruanda. Also that in a papyrus swamp near Masikini, at 5500 feet, in the highlands west of Lake Albert, de Witt Sage secured a female on August 17, "and we saw two others." This last record probably represents the nearest locality from Kano and Bornu at which this Teal has been previously recorded—let us say roughly 1700 miles as the duck flies. The Hottentot Teal is said not to be a migratory bird.

Capt. Claude H. B. Grant and Mr. C. W. Mackworth-Praed sent the following three notes :—

1. A further Note on the Status of Egretta gularis, Bosc, Actes. Soc. d'Hist. Nat. Paris, i. 1792, p. 4, pl. ii. : Senegal River.

Since the publication of our notes on the species and subspecies of *Egretta garzetta garzetta* in the Bull. B. O. C. liii. 1933, p. 189, Dr. J. P. Chapin has informed us that the bills of specimens, in both white and dark slate phases, in the American Museum of Natural History from Fernando Po and São Thomé "seem never blackish, although they may shade to dusky brown on the culmen," and we have also examined specimens at the Paris Museum and discussed the matter with Dr. Berlioz. Five specimens were examined at the Paris Museum, two from Konakry (nos. 1643 and 1644), two from the Congo coast (nos. 262 and 263) and one from the coast between Cape Palmas and Calabar (no. 1368). These five birds are all in the dark phase, and

the bills in the dried skins are not black, but dusky, the lower mandible being paler. These agree in bill-coloration with the information sent to us by Dr. Chapin and with specimens in the British Museum from the mainland of West Africa and the islands of Annobon, Principé, and Fernando Po, but the two specimens from the Congo coast do not fall within the measurements given by us, one having a culmen of 75 mm. and the other a culmen of 73 mm. and a tarsus of 75 mm. There are eight dusky-billed specimens in the British Museum Collection, with the soft parts recorded on the labels; these give, for the bill :—Blackish, green base of lower mandible; black, lower pinkish; black, basal half of lower bluish-white; upper warm sepia, lower pinkish-grey; dirty flesh colour, upper darker at base. Bosc's description of his *Ardea gularis* is that of a dark slate bird (fusco-nigriscente), with a white throat and alulæ, bill fawn (fauve), darker at base of upper mandible; feet blackish, toes darker.

We may, therefore, conclude that the bill of the type was similar to the dusky-billed specimens we have examined in Paris and London. There is in the British Museum Collection a dark slate female with a black bill, base of lower mandible pale, which was taken in Sierra Leone on March 4, 1920 (Brit. Mus. Reg. no. 1920.6.15.10).

This bird, with its distinct black bill, is a dark phase of *Egretta garzetta garzetta*, similar to the same phase found in Eastern Africa and Madagascar. Dr. Finn Salomonsen has suggested to us that perhaps the black-billed and dusky-billed birds are but colour-phases one of the other, as in *Casmerodius albus* (Linnæus), and this may be so, but the evidence we have now inclines us to treat *E. gularis* as a separate species.

To summarize this and previous notes in the 'Bulletin,' we have in West Africa two distinct species found side by side :—

(1) Egretta gularis (Bosc).

Distinguished by its *dusky*, not black, bill, and confined to the coast of the mainland from Senegal to the French Congo and the islands of Fernando Po, Principé, São Thomé,

Annobon and Los, and having both white and coloured phases of plumage.

(2) Egretta garzetta garzetta (Linnæus).

Distinguished by its *black* bill and found throughout the mainland of Africa, including West Africa, and also having both white and coloured phases of plumage.

This now agrees with the range and nomenclature given by Bannerman, Bds. Trop. W. Africa, i. 1930, pp. 67 & 69.

On the east side of Africa we also have two distinct species found side by side :—

(1) Egretta schistacea (Ehrenberg).

Distinguished by its *yellow* bill, and confined to the Nile Valley up to Lake Albert, coasts of the Red Sea, Somaliland, and east to Ceylon and the Laccadives, and having both white and coloured phases of plumage.

(2) Egretta garzetta garzetta (Linnæus).

Also found throughout Egypt and Eastern Africa, and having both white and coloured phases of plumage, the coloured phases being confined to East Africa only.

Egretta garzetta dimorpha Hartert is confined to Madagascar.

We are of opinion that all the above should now be placed in the genus *Egretta*, and that *Demigretta* be retained for the eastern bird, *Demigretta sacra* (Gmelin).

2. On the Races and Distribution of the African and Arabian Kestrels of the Falco tinnunculus group, with descriptions of two new races.

Sclater, in the Syst. Av. Œthiop. i. 1924, p. 53, recognizes five forms of *Falco tinnunculus tinnunculus* Linnæus, and under *F. t. carlo* remarks that the S.W. Arabian form is perhaps distinct. Bannerman, Bds. Trop. W. Afr. i. 1930, p. 213, uses *F. t. carlo* for the West African bird, although he had commented on the differences of the West African bird in 'The Ibis,' 1924, p. 211. In the J. f. Ornith. 1932, p. 529, Hartert and Neumann revise this group, describe a new race, *F. t. archeri*, and uphold *F. t. rhodesi*. Chapin, Bds. Belg.

Congo, i. 1932, pp. 641–642, discusses at some length the question of races and distribution, and gives valuable notes on individual specimens he has examined.

We may remark that, except in the original reference, this author has changed the second "*u*" in *rufuscens* to an "*e*". The original spelling is *rufuscens*.

In view of these divergent opinions and the recent acquisition of further material by the British Museum (Natural History), we have re-examined the literature, as well as the series, in the British Museum Collection, and after very very careful consideration we have come to the following conclusions.

There are undoubtedly several resident breeding races, the breeding areas and distribution of which are at present not by any means clearly known. Besides the resident races, which appear to be subject to local migration in the non-breeding season, there are two races which migrate into the areas of the resident races during their non-breeding season—the European Kestrel, *F. t. tinnunculus*, and the Egyptian Kestrel, *F. t. rupicolæformis*. These two races have done much to confuse the real issue, coupled with the fact that nearly all the specimens of African Kestrel of all races in the Collection have been collected during the months when the northern migrants are visiting Africa. What we require now is specimens, and these in pairs, with the young or eggs, of breeding birds, and from such a series the correct status of the races already named and their breeding range could be settled, and, no doubt, several new races would have to be described. It must be admitted that this group is an extremely difficult one, and it is only after intensive examination and re-examination and comparison that some specimens, especially females, can be satisfactorily identified. We are not pretending that this new revision is by any means the last word, and can only say that the conclusions we have come to have been arrived at only after much study and time.

The barring on the tail, and on which some authors have laid stress, is, in our opinion, an unreliable character, being one more of age and individuality, although it is possible

that in the case of *F. t. rufuscens* fully adult males do not assume a barless tail.

We recognize eight races, two of which are new, as follows :—

(1) Falco tinnunculus tinnunculus Linnæus.

Falco tinnunculus Linnæus, Syst. Nat. ed. x. 1758, p. 90 : Sweden.

Description.—A pale race ; the male has the mantle, back, scapulars, and wing-coverts pale pinkish-rufous ; crown of head, rump and tail dove-grey or blue-grey ; female dirty rufous, with distinct barring ; variable amount of grey on rump, upper tail-coverts and base of tail.

Measurements.—

	Wing.	Tail.
♂	230–255 mm.	147–183 mm.
♀	238–264 ,,	154–185 ,,

Distribution.—Europe and Asia to Amurland, northern Africa south to Tanganyika Territory, southern Arabia and Angola in non-breeding season.

Remarks.—Sixty-five males and seventy females examined.

The specimens from Loge River (Brit. Mus. Reg. no. 1873.12. 10.111) and St. Paul de Loanda (Brit. Mus. Reg. no. 1911.12.18. 145) mentioned by Chapin (*op. cit.* pp. 643–644) belong to this race.

(2) Falco tinnunculus rufuscens Swainson.

Falco rufuscens Swainson, Bds. W. Afr. vii. 1837, p. 109 : Senegal.

Description.—A very dark race ; the male has the mantle, back, scapulars and wing-coverts dark chestnut-brown with a vinous tinge, heavily barred with black ; crown, rump, upper tail-coverts, and tail darkish slate, tail partially barred, crown distinctly streaked ; below dark buff and light chestnut, heavily marked ; the female equally dark and heavily marked, with a slaty tinge on rump, upper tail-coverts, and base of tail, which is completely barred.

Measurements.—

	Wing.	Tail.
♂	224–238 mm.	142–152 mm.
♀	240 ,,	165 ,,

Distribution.—Senegal to Cameroons and Belgian Congo.

Remarks.—Three males and one female examined, but also see Chapin, *op. cit.* p. 642.

(3) Falco tinnunculus rupicolæformis Brehm.

Falco rupicolæformis Brehm, Vogelfang, 1855, p. 29 : Egypt.

Description.—Male more rufous, less pinkish on upper parts than *F. t. tinnunculus*, and rather more heavily spotted; crown washed with rufous, with broader black streaks; below more richly coloured and more heavily marked. Female paler than average female of *F. t. tinnunculus*, and warmer in colour, tinged with richer rufous, upper tail-coverts and base of tail washed with dove-grey.

Measurements.—

	Wing.	Tail.
♂	233–272 mm.	153–183 mm.
♀	240–263 ,,	160–174 ,,

Distribution.—Egypt, south to Tanganyika Territory and southern Arabia in non-breeding season.

Remarks.—Eight males and twelve females examined.

(4) Falco tinnunculus archeri Hartert & Neumann.

Falco tinnunculus archeri Hartert & Neumann, J. f. Ornith. 1932, p. 531 : Waghar Mts., British Somaliland.

Description.—Similar to *F. t. tinnunculus* but smaller; female perhaps on the average paler than that of the typical form.

Measurements.—

	Wing.	Tail.
♂	222–232 mm.	140–155 mm.
♀	226–230 ,,	141–152 ,,

Distribution.—Somaliland and coastal area of Kenya Colony to Lamu; island of Socotra.

Remarks.—Ten males and three females examined, including a breeding male collected at Sheikh, Somaliland, on October 11, 1917, by Sir G. F. Archer, and marked "No. 487 *a*, eggs no. 93" (Brit. Mus. Reg. no. 1923.8.7.7141).

(5) Falco tinnunculus carlo Hartert & Neumann.

Cerchneis tinnunculus carlo Hartert & Neumann, J. f. Ornith. 1907, p. 592 : Bissidimo, nr. Harar, Abyssinia.

Description.—Male generally darker than that of *F. t. tinnunculus*; mantle, back, scapulars and wing-coverts more chestnut, with a vinous tinge, but not so dark as the male of *F. t. rufuscens*, and mantle more spotted than barred: crown, rump, upper tail-coverts, and tail much darker slate, but perhaps a shade paler than *F. t. rufuscens*; below rich buff and rufous, but less heavily marked than *F. t. rufuscens*; female more similar to that of *F. t. rufuscens*, but warmer and richer in general coloration.

A rather smaller race than the typical.

Measurements.—

	Wing.	Tail.
♂	227–241 mm.	151–166 mm.
♀	221–259 ,,	151–179 ,,

Distribution.—The Sudan, Abyssinia, Somaliland to Uganda, Kenya Colony, and northern Tanganyika Territory.

Remarks.—Fourteen males and fourteen females examined.

There is no doubt that this form occurs in Somaliland alongside *F. t. archeri*, but there is a possibility that it only occurs there on migration. Specimens we have examined are dated July to October, and this may be the non-breeding season. The Narossura (Brit. Mus. Reg. no. 1916.12.1.234), Elgonyi (Brit. Mus. Reg. no. 1910.12.26.53), Gofa (Brit. Mus. Reg. no. 1912. 10.15.242), and Lake Ganjule (Brit. Mus. Reg. no. 1912.10.15.244) birds mentioned by Chapin (*op. cit.* p. 643) belong to this race.

This race also occurs at Ujiji, and probably elsewhere in northern Tanganyika Territory. The specimens we have examined have been kindly lent to us by the Museum of Comparative Zoology, five of which are recorded by Bangs and Loveridge, Bull. Mus. Comp. Zool. lxxv. 1933, p. 149, under *F. t. carlo*; but no. 148228 (a male) is, in our opinion, a specimen of *F. t. rupicolæformis*, as is also another male from Morogoro (M.C.Z. no. 133152) dated Jan. 29, 1918. It is possible that it is only a migrant to Tanganyika Territory.

(6) Falco tinnunculus tanganyikæ Claude Grant & Mackworth-Praed.

Falco tinnunculus tanganyikæ Claude Grant & Mackworth-Praed, Bull. B. O. C. liv. 1933, pp. 21–22 : Kigoma, Tanganyika Territory.

Description.—Similar in size to *F. t. tinnunculus*, but much darker and richer in colour; mantle, back, scapulars, and wing-coverts deep chestnut-brown, with no vinous tinge, darker and richer than either *F. t. rufuscens* or *F. t. carlo*, grey of crown, rump, upper tail-coverts, and tail dark slate, deeper in shade than either *F. t. rufuscens* or *F. t. carlo*; below much darker and richer than *F. t. tinnunculus*, *F. t. rufuscens*, or *F. t. carlo*, more rufous to chestnut, with dark chestnut edges to flank-feathers. Female also chestnut-brown above, without vinous tinge; below darker than other races, more rufous and chestnut.

Measurements.—

	Wing.	Tail.
♂	238 mm.	149 mm.
♀	248 ,,	157 ,,

Distribution.—Tanganyika Territory.

Remarks.—An adult male and female, paired, with a brood of four young birds, which had bred in the roof of the collector's bungalow.

Besides the above family party, we have examined an adult ♀ from Kondoa–Irangi, collected on May 28, 1928 (Brit. Mus. Reg. no. 1929.8.17.12). This specimen is in moult, and the wing cannot be measured, but the tail measures 159 mm.; and another from Mkangagi, Uluguru Mts., a female, kindly lent to us by the Museum of Comparative Zoology, dated October 20, 1926, no. M.C.Z. 237536, has a wing-measurement of 239 mm.

(7) Falco tinnunculus buryi Claude Grant & Mackworth-Praed.

Falco tinnunculus buryi Claude Grant & Mackworth-Praed, Bull. B. O. C. liv. 1933, pp. 22–23 : Dthala, Amiri District, South Arabia.

Description.—On the average equal in size to *F. t. carlo*. Similar to *F. t. tinnunculus*, but more richly coloured, especially

below, and thighs more rufous, grey crown of head more distinctly streaked, grey rump, upper tail-coverts, and tail similar to *F. t. tinnunculus*; mantle, back, scapulars, and upper coverts lacking the vinous tinge of *F. t. carlo*. It is, however, in the female that the differences are most striking, as the adult is, both above and below, much warmer and richer in colour than either the female of *F. t. tinnunculus*, *F. t. rupicolæformis*, or *F. t. archeri*, but is more rufous and lacks the darker vinous tinge of the female of *F. t. carlo*, and the rump, upper tail-coverts, and tail are wholly slate-coloured, the tail being partially barred.

Soft parts: bill slate; cere, orbital patch, and feet yellow.

Measurements.—

	Wing.	Tail.
♂	229–242 mm.	156–162 mm.
♀	224–249 ,,	145–170 ,,

Distribution.—Southern Arabia (Aden Protectorate, east to Dhufar).

Remarks.—Five females and six females examined.

(8) Falco tinnunculus rupicolus Daudin.

Falco rupicolus Daudin, Traité d'Orn. ii. 1800, p. 135: Cape of Good Hope.

Description.—We have examined fifty-one specimens of this race, and find that there is considerable individual variation in the general colour and in the markings on the upper parts and tail, which must be allowed for, and the series in the British Museum Collection show that there are specimens from Southern Africa (Cape Colony and Natal) which agree in size, markings, and colour with birds from Rhodesia and Angola.

We are, therefore, unable to recognize *Falco tinnunculus rhodesi* Finch-Davies, Ibis, 1920, p. 620: Matopo Hills, Rhodesia.

Measurements.—

Cape Colony:—

	Wing.	Tail.
♂	222–249 mm.	140–161 mm.
♀	246–270 ,,	144–167 ,,

Eight males and three females examined.

Natal :—

	Wing.	Tail.
♂	237–240 mm.	147–153 mm.
♀	249 ,,	152 ,,
Unsexed.	233–254 ,,	139–159 ,,

Two males, one female, and four unsexed examined.

Zululand :—

	Wing.	Tail.
♀	256–258 mm.	162–163 mm.

Two females examined.

Namaqualand :—

	Wing.	Tail.
♂	240 mm.	149 mm.
♀	250 ,,	162 ,,

Two examined.

Damaraland :—

	Wing.	Tail.
♂	228–248 mm.	144–150 mm.
Unsexed.	237 ,,	151 ,,

Three males and one unsexed examined

Angola :—

	Wing.	Tail.
♀	240–242 mm.	141–144 mm.
Unsexed.	220–230 ,,	141–147 ,,

Two females and two unsexed examined.

Orange River Colony :—

	Wing.	Tail.
♀	253 mm.	150 mm.
Unsexed.	229–247 mm.	140–153 mm.

One female and three unsexed examined.

Transvaal :—

	Wing.	Tail.
♂	229–240 mm.	133–151 mm.
♀	245–253 ,,	148–166 ,,

Three males and five females examined.

Mashonaland :—

	Wing.	Tail.
♂	225–239 mm.	137–139 mm.
♀	256 ,,	155 ,,

Three males and one female examined.

Bechuanaland :—

	Wing.	Tail.
♂	230 mm.	152 mm.
Unsexed.	249 ,,	153 ,,

Two examined.

Zambesi :—

	Wing.	Tail.
Unsexed.	216 mm.	137 mm.

One examined.

Nyasaland :—

	Wing.	Tail.
♀	225 mm.	128 mm.
Unsexed.	232 ,,	144 ,,

Two examined.

Combined measurements are :—

	Wing.	Tail.
♂	222–249 mm.	133–161 mm.
♀	240–270 ,,	141–167 ,,

Distribution.—South Africa, north to Angola and Nyasaland.

Remarks.—All tail-measurements have been taken from the base of the feathers.

3. On the Distribution of the African Resident and Migratory Kites, Milvus migrans migrans, M. m. ægyptius, M. m. arabicus, M. m. parasitus, and a new subspecies.

Considerable confusion exists in the correct identification and consequent distribution of these Kites, mainly due to the young birds of the yellow-billed forms having dark-coloured bills, the fact that some races migrate into the territory of the others during the non-breeding season, and the mystery

of the few records of the migrations of the African forms, which probably will not be satisfactorily explained until extensive ringing has been carried out.

This new revision, which shows that northern birds, which have been placed under *M. m. parasitus*, are different from southern birds, has a direct bearing on the question of the migrations or movements reported by such observers as Swynnerton (Ibis, 1907, p. 302), Bates (Ibis, 1909, p. 11), Neave (Ibis, 1910, p. 105), Lynes (Ibis, 1925, p. 398), and Chapin (Bds. Belg. Congo, i. 1932, p. 553), and clearly shows that these movements cannot take place over very wide areas, as, for instance, from South Africa to West Africa. Chapin has summarized and commented upon most of the known information, but we would remark that the coincidence of the Kites being abundant in the Cameroons and Uelle District at the same time as they occur in South Africa (Chapin, *op. cit.* p. 554) is accounted for by the Cameroons and Uelle bird being a different race to the South African.

Bates's observations show that the movement is not complete, as he saw birds in May, September, and October. Lynes states that they are resident in Darfur, although a movement was observed northwards in June and July, and southwards in August. Belcher (Bds. Nyasaland, 1930, p. 33) says that it is resident in Nyasaland. We can find no recent observations on the South African form to support or refute the statement by Stark and Sclater (Fauna S. Afr. iii. 1903, p. 337) that the Kite only occurs there from October to March, although Swynnerton states that it visits the Melsetter District of Mashonaland between September and February. Bates (Handb. Bds. W. Afr. 1930, p. 159) states that in the non-breeding season "they follow the rains." Lynes (Ibis, 1925, p. 398) inclines to the view that their movements are local. As the Kite is very partial to termites, and as these normally fly in the wet season, it would appear that their movements are controlled by the rains, as stated by Bates, and are merely local movements caused by the birds' fondness for certain insect food, and not the true migration of a bird definitely leaving its breeding-haunts for the non-breeding season.

We are able to recognize five forms, as follows :—

(1) Milvus migrans migrans (Boddaert).

Falco migrans Boddaert, Tabl. Pl. Enl. 1783, p. 28, no. 472 : France.

Description.—Bill black at all ages.

Measurements.—Wing 426–491 mm.

Distribution.—Europe to Central Asia, northern Africa south to the Transvaal, South-West Africa, Arabia and Madagascar in non-breeding season.

Remarks.—The one specimen from Madagascar (Brit. Mus. Reg. no. 1931.8.18.14) is not quite typical, is dated July 27, is a female, and the label gives "ovary slightly enlarged." This specimen suggests the possibility of a resident black-billed form in Madagascar, but we refrain from giving a name on a single specimen.

Thirty-two specimens examined.

(2) Milvus migrans ægyptius (Gmelin).

Falco ægyptius Gmelin, Syst. Nat. i. pt. i. 1788, p. 261 : Egypt.

Description.—A yellow-billed form, the young bird having a dark bill.

Measurements.—Wing 407–461 mm.

Distribution.—Egypt and Arabia, south to Sudan and Kenya Colony in non-breeding season.

Remarks.—Twenty-two specimens examined.

(3) Milvus migrans parasitus (Daudin).

Falco parasitus Daudin, Traité d'Orn. ii. 1800, p. 150 : Peddie District, eastern Cape Colony, South Africa.

Description.—A yellow-billed form, the young bird having a dark bill. On the average smaller than *M. m. ægyptius*, and darker in general colour, especially the chest, tail, underside of wings, and crown of head.

Measurements.—Wing 393–445 mm.

Distribution.—South Africa north to Angola, southern Rhodesia, Kenya Colony and Uganda, Madagascar and the Comoro Islands.

Remarks.—Tanganyika Territory, Kenya Colony, and Uganda specimens intergrade with *M. m. tenebrosus*.

Thirty-one specimens examined.

(4) Milvus migrans arabicus Kirke Swann.

Milvus migrans arabicus Kirke Swann, Syn. Accip. ed. 2, 1922, p. 153: Lahej, South Arabia.

Description.—Bill blackish or slate, never so deep a black as in *M. m. migrans*. General colour more chestnut. Size equal to *M. m. parasitus*.

Measurements.—Wing 398–448 mm.

Distribution.—Southern Arabia, Red Sea province of the Sudan, through Eritrea, eastern Abyssinia, the Somalilands to coastal area of Kenya Colony as far south as Malindi.

Remarks.—Sixteen specimens examined.

(5) Milvus migrans tenebrosus Claude Grant & Mackworth Praed.

Milvus migrans tenebrosus Claude Grant & Mackworth-Praed, Bull. B. O. C. liv. 1933, p. 23: Beoumi, Ivory Coast, West Africa.

Description.—A yellow-billed form, the young bird having a dark bill. Very much darker and blacker in general appearance than *M. m. ægyptius*. Differs from *M. m. parasitus* in being much darker, more sooty and blackish. Size equal to *M. m. parasitus*.

Measurements.—Wing 395–454 mm.

Distribution.—West Africa south to Angola, northern Rhodesia and upper Zambesi, Sudan, Abyssinia to Uganda, Kenya Colony, and Tanganyika Territory, Belgian Congo, Zanzibar and Pemba.

Remarks.—Forty-six specimens examined.

Dr. Finn Salomonsen sent the following descriptions of new birds from the Moluccas:—

Alcyone pusilla halmaheræ, subsp. nov.

Description.—As *A. p. pusilla* (Temminck & Laugier), but upper parts and flanks bluish, not violet, the colour being between that of *A. p. richardsi* Tristram (Rendova) and *A. p. masauji* (Mathews) (New Ireland), but nearest to the first-mentioned.

Distribution.—Halmahera in the Moluccas, thus forming the most northern part of the breeding area of this King-

fisher. Probably also Batjan (coll. Platen; *cf.* Hartert, Nov. Zool. x. 1903, p. 48).

Type.—In the British Museum, Halmahera (Gilolo), adult; coll. Wallace, 1860. Brit. Mus. Reg. no. 1873.5.12.1427.

Geoffroyus geoffroyi stresemanni, subsp. nov.

Description.—Not differing from *G. g. rhodops* (Schlegel).

Measurements.—Much bigger than *rhodops*; 5 ♂♂ ad. from Buru and Seran measure (wing): 200, 197, 194, 191, 188 mm. ♂ juv.: 186 mm. 5 ♀♀ ad.: 195, 193, 191, 186, 180 mm. The measurements of *rhodops* are decidedly smaller; 6 ♂♂ ad. from Amboyna measure: 183, 179, 177, 175, 175, 173 mm. 2 ♂♂ juv.: 169, 173 mm. 2 ad. ♀♀: 178, 173 mm., both unfortunately in moult. Hartert gives for this race (Buru, Seran) 189–195 mm. wing-length, which corresponds with my measurements (Nov. Zool. viii. 1901, p. 4).

Distribution.—Buru, Seran, in the Moluccas. The type-locality of *rhodops* is Amboyna, as Schlegel in the original description (Mus. Pay-Bas, iii. 1864, p. 43) first mentions a series from Amboyna, and later on some Buru birds.

Type.—In the British Museum, ♂ ad.; Buru, 10.4.1922, coll. C. B. Pratt. Brit. Mus. Reg. no. 1923.9.15.59.

Remarks.—I name this form after my friend Dr. Erwin Stresemann, whose works on the birds from these islands are well known to all ornithologists.

Ducula concinna aru, subsp. nov.

Description.—The upper parts rather dull coloured, with more coppery, not so steel-green gloss as in *D. c. concinna* (Wallace); upper tail-coverts green, in *concinna* blue; hind neck with a conspicuous cinnamon wash, in *concinna* uniform grey, or with a slight rosy tinge. Regarding other particulars, as *concinna*.

Distribution.—Aru Islands, in the Moluccas. The type-locality of *D. c. concinna* is the Sanghir Islands.

Type.—In the British Museum, ♂ ad., Aru Islands, 1857; coll. Wallace. Brit. Mus. Reg. no. 1881.5.1.5021.

Remarks.—Three specimens examined.

PROTECTION OF THE KITE.

The following is the text of an appeal which was issued on December 15, 1933, in favour of the Kite, which is seriously threatened with extinction in this country.

THE PROTECTION OF THE KITE.

The question of what should be done to preserve the few remaining pairs of the Kite (*Milvus milvus*) which still breed in Wales has now reached such a critical phase that if some very effective steps are not immediately taken their final doom seems certain.

Wales alone now represents the last hope for the Kite. Formerly abundant everywhere in Great Britain, it has, like the ancient Briton, gradually been driven back and back to its last stronghold among the forested valleys of the land of hope and glory. It is hoped that this S.O.S. appeal may not be too late, and that it will call forth a determined effort on the part of Welsh landowners, farmers, gamekeepers, and sportsmen to secure for the Kite, as they can if so willed, this one last desperate chance to carry on its race for the enjoyment of posterity.

The fight for its existence will be worth while, and will depend solely upon the goodwill of the Welshmen. It will be more than worth while; for the Kite is not only one of the last survivors of our larger birds of prey, but its magnificent evolutions in the air are a fitting symbol of a land of freedom and wild beauty.

Moreover, the Kite has an historical interest for us. It forms a link in the chain connecting us with Tudor London. In the reign of Queen Elizabeth it was one of the common sights of the metropolis. Leicester, Essex, Raleigh, Walsingham, and Burleigh must have watched it scores of times as it soared magnificently over the Thames. Shakespeare in his 'Winter's Tale,' Act iv., scene 2, gives us a word of warning about it:—"When the Kite builds," he says, "look to lesser linen"; for the Kite had a playful way of swooping down on the Londoner's linen spread out on the hedges to dry,

and of carrying off unconsidered trifles of millinery to weave into its nest.

Given only a national will to preserve it there is no reason why the Kite should not once more be seen over London, to say nothing of the country in general. For years the efforts and resources of private individuals and of such bodies as the Royal Society for the Protection of Birds and the British Ornithologists' Club have been spent in fruitless endeavours to protect this splendid and interesting bird of prey from the cunning depredations of the *reckless* egg-collector, as also from the chance gunman, trap, or snare when its young wander far afield, *during the open season*. It is thought that the time has come when an appeal should be made to the good sense and determination of the public at large to preserve for posterity a bird which is linked up with its national history.

PERCY R. LOWE.
In charge of Ornithology,
British Museum (Natural History).

AN APPEAL.

Since the beginning of the present century much has been done for the preservation of this beautiful and interesting bird. Various causes are, nevertheless, leading to an ever increasing diminution in its numbers, and it is imperatively felt that wider interest and support should be sought among landowners and ornithologists.

All who have at heart the preservation of British Birds are, therefore, urged to make every endeavour within their power to protect this bird, which DURING THE OPEN SEASON is liable to fall a victim to the gun or trap.

Precautions can be, and are, taken for safeguarding nesting sites and eggs, but when the breeding season is over the birds and the young fly far afield, and often perish in remote places.

Landowners, Farmers, Gamekeepers, and all shooting men are urged to be on the alert to spare the KITE, which, as is

well known, is feared by many to be in danger of extinction as a British breeding species.

This handsome bird is easily distinguishable from all other large British Birds by its long, deeply cleft tail, long, pointed wings, and rufous plumage.

WINIFRED PORTLAND,
President, Royal Society for the Protection of Birds.

CRAWFORD and BALCARRES,
President, Council for the Preservation of Rural England.

HOWARD DE WALDEN,
President, Council for the Preservation of Rural Wales.

H. F. WITHERBY,
President, British Ornithologists' Union.

DAVID A. BANNERMAN,
Chairman, British Ornithologists' Club.

GLANUSK,
Lord Lieutenant, Breconshire.

LISBURNE,
Lord Lieutenant, Cardiganshire.

DYNEVOR,
Lord Lieutenant, Carmarthenshire.

PLYMOUTH,
Lord Lieutenant, Glamorganshire.

C. Venables Llewelyn,
Lord Lieutenant, Radnorshire.

15th December, 1933.

Contributions towards the Kite Preservation Fund will be gratefully received and acknowledged by the Royal Society for the Protection of Birds, 82 Victoria Street, London, S.W. 1.

We regret to have to announce the resignation from the Club, through ill-health, of Mr. Arthur Humble Evans. Mr. Evans was an original member, joining the Club at its inception on October 5, 1892.

NOTICES.

The next Meeting of the Club will be held on Wednesday, January 10, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

There is no set paper, so far, for the Meeting, so Members who have any exhibits of interest are invited to bring them.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXIV.

THE three-hundred-and-sixty-ninth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, January 10, 1934.

Chairman : Mr. D. A. BANNERMAN.

Members present :—Dr. W. J. ADIE ; E. C. STUART BAKER ; Miss P. BARCLAY-SMITH ; F. J. F. BARRINGTON ; P. F. BUNYARD ; Hon. G. L. CHARTERIS ; Maj.-Gen. Sir P. Z. COX ; Miss J. M. FERRIER ; H. A. GILBERT ; Capt. C. H. B. GRANT ; Rev. J. R. HALE ; Dr. J. M. HARRISON ; Mrs. C. HODGKIN ; Rev. F. C. R. JOURDAIN ; N. B. KINNEAR ; Miss E. P. LEACH ; B. LLOYD ; Dr. G. CARMICHAEL LOW (*Editor*) ; Dr. N. S. LUCAS ; T. H. MCKITTRICK ; C. W. MACKWORTH-PRAED (*Hon. Sec. & Treas.*) ; Capt. J. H. MCNEILE ; Lt.-Col. H. A. F. MAGRATH ; Dr. P. H. MANSON-BAHR ; G. M. MATHEWS (*Vice-Chairman*) ; C. OLDHAM ; B. B. OSMASTON ; H. LEYBORNE POPHAM ; F. R. RATCLIFF ; Miss G. RHODES ; W. L. SCLATER ; Dr. C. B. TICEHURST ; B. W. TUCKER ; Miss E. L. TURNER ; H. F. WITHERBY ; C. G. M. DE WORMS.

Guests :—R. DOBSON ; R. M. LOCKLEY.

The Rev. F. C. R. JOURDAIN made some remarks upon the status and protection of the Great Skua (*Catharacta s. skua*)

in Shetland. Mr. C. Oldham, Mr. H. A. Gilbert, Dr. G. Carmichael Low, and others also spoke on the subject.

Mr. C. Oldham exhibited shells of a whelk, *Buccinum undatum*, which had been dropped from a height on to the sandy shore at Tenby by Herring Gulls in order to fracture them and facilitate the extraction of the contained hermit-crabs, and fractured shells of the cockle, *Cardium edule*, dropped in a similar manner by Common Gulls on to the sands in the estuary of the Cheshire Dee in order to make the contained molluscs accessible. He also exhibited shells of *Buccinum*, which, with other marine shells—*Ostrea*, *Modiolus*, *Pecten*, *Mya*, etc.—had been carried from the shore to the sand-dunes on Scolt Head Island by Gulls and Crows, where, in the absence of suitable stones, they had been used by Song-Thrushes as anvils for smashing the shells of the snail, *Helix nemoralis*.

Miss J. M. Ferrier showed a series of eggs from Cyprus. These included eggs of the Hooded Crow (*Corvus cornix pallescens*), the Goldfinch (*Carduelis carduelis harmsi* ?), the Crested Lark (*Galerida cristata cypriaca*) a clutch, the Short-toed Lark (*Calandrella b. brachydactila*) a clutch, and the Cyprian Pied Wheatear (*Œnanthe leucomela cypriaca*).

Mr. H. L. Popham exhibited the skin of a buff-coloured female Wigeon (*Anas penelope*). He said that he had shown the specimen once before to the Club*, but thought that many of the younger members might like to see it as it was a very rare and unique specimen. The bird was shot by himself off the coast of Holland in January 1912.

Mr. W. L. Sclater sent the following note on *Sigmodus scopifrons* Peters :—

This species was first obtained by Professor Wilhelm Peters during his travels in Mozambique between the years 1842–1848, but no exact locality was indicated (J. f. Ornith. 1854, p. 422). Its range has since been found to extend northwards

* Bull. B. O. C. xxix. 1912, p. 90.

as far as Lamu, on the coast of Kenya, inland to the Morogoro district in Tanganyika and Meru (on the eastern slopes of Mt. Kenya) in Kenya Colony, and south to the Beira district, and several races have been described.

The species is characterized by the curious pad or cushion of short bristle-like feathers on the forehead of a rich chestnut-colour, while the rest of the plumage is slaty or dusky.

In consequence of this peculiarity Professor Neumann (J. f. Ornith. 1920, p. 77) separated the species from *Sigmodus* and named it *Knestrometopon*, but there is no other structural character separating it from *Sigmodus*.

The Natural History Museum has recently received a series of four skins collected by Mr. Moreau from the East Usambaras, and by the kindness of Count Gyldenstolpe and Dr. Stresemann I have been allowed to examine the material in the Stockholm and Berlin Museums, including Dr. Peters' type.

The examination of this material and that already in the Museum brings me to the following conclusions as regards the racial forms of this remarkable bird :—

1. S. s. SCOPIFRONS.

Sigmodus scopifrons Peters, J. f. Ornith. 1854, p. 422 : Mozambique.

A grey band on the crown behind the " cushion " hardly perceptible ; very distinct white lores ; a white band on the inner web of the primaries well developed, measuring about 15 mm. broad on the fourth primary ; white on the tip of the outer tail-feather reduced, measuring about 10–12 mm.

Examples examined : from Mozambique (type in the Berlin Museum), Masambeti (*C. Grant*), Lindi and Mikindini (*Grote*, in Berlin Mus.).

2. S. s. [examples from Usambara Hills].

Grey band on crown as in the typical race ; less white on the lores ; white band on the primaries much narrower, about 5 mm. wide on the fourth primary ; white on the tip of the outer feather much wider, about 25 mm., and occupying about half the visible portion of the feather.

Examples examined : 4, Usambara Hills (2 ♂, 2 ♀, *Moreau*), 1 Mamboio (*Kirk*).

3. S. s. KIRKI.

Sigmodus scopifrons kirki, W. L. Sclater, Bull. B. O. C. xliv. 1924, p. 92 : Lamu.

Band on the crown behind the cushion white, not grey ; no white on the lores ; white band on the wing reduced to a small patch on the inner web and never reaching the shaft ; white on the outer tail-feather as in Usambara examples.

Examples examined : Lamu (*Kirk*, type of the subspecies), Mombasa, Malindi, Lamu (*S. Clarke*).

4. S. s. KENIENSIS.

Sigmodus scopifrons keniensis van Someren, Bull. B. O. C. xliii. 1923, p. 80 : Meru, North-west of Mt. Kenya.

Band on the crown grey and obscure ; trace of white on the lores ; white on the primaries less than in *kirki*, reduced to a tiny spot ; white on the tail as in *kirki*, slightly larger, viz., 100–103 mm.

Examples examined : 2 Meru (*Lönnberg*, in the Stockholm Museum).

The series shows a series of slight changes therefore from south to north in the reduction of the white on the wings and the increase of white on the tail. We have already three named races, and it does not seem worth while giving a definite name to that from Usambara, which is obviously an intermediate.

Dr. C. B. TICEHURST forwarded the following description of a new form of *Phylloscopus* :—

Phylloscopus armandii perplexus, subsp. nov.

Description.—Like *Phylloscopus armandii armandii*, but darker on the upper parts, yellow of underparts not so pale, flanks darker fulvous.

Distribution.—S.W. Szechuan, N. Yunnan (Lichiang Range, Yangpi Valley, Mekong Valley) ; Lower Chindwin (January), Mt. Victoria (April), and Southern Shan States (no date, but probably spring) in Burma.

Type. — ♂? Chien-Chuan Valley, lat. 26° 40′ N. :

N.W. Yunnan, May 1918, collected by G. Forrest. Brit. Mus. Reg. no. 1921.7.5.399.

Remarks.—Material examined : seven *armandii* ; eighteen *perplexus*. This form is quite easily recognizable, but has evidently been a puzzle in the past to ornithologists. Thus, Col. Rippon's series from the Shan States have been named *fuscatus*, *schwarzi*, and *indicus* ! Dr. Berlioz kindly informs me that Milne-Edwards' type of *armandii* came from the mountains west or north-west of Pekin, and from this area I have seen a specimen in the Stötzner-Weigold collection in Dresden (through the courtesy of Dr. W. Meise). Others of the typical form were collected by Przevalsky on the Upper Hwang Ho and Chuan Che, and by Berezovsky in Kansu. The southern limit, so far ascertainable, of the typical form is the mountains of N.W. Szechuan, whence I have examined birds obtained by the Stötzner–Weigold Expedition at Sungpan. *Phylloscopus armandii* thus agrees with other wide-ranging *Phylloscopi*, such as *inornatus* and *proregulus*, in having a northern and a southern form.

Mr. J. Delacour sent the following note :—

The name *Pitta soror intermedia* Delacour, Bull. B. O. C. xlix. 1928, p. 49, being preoccupied by *Pitta versicolor intermedia* Mathews, Nov. Zool. xix. 1912, p. 298, the following is proposed in its place :

Pitta soror petersi, nom. nov.

NOTICES.

The next Meeting of the Club will be held on Wednesday, February 21, 1934 (instead of Wednesday, February 14, which is Ash Wednesday), at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the ' Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

The attention of Members is drawn to the fact that the March Meeting, which will be held on Wednesday, March 14, 1934, in conjunction with the British Ornithologists' Union, will be devoted principally to lantern-slides. The Hon. Secretary will be glad to hear from any Member who wishes to exhibit slides.

Agenda

(for February Meeting).

1. Mr. B. W. Tucker will give an account of an ornithological trip to Ireland, illustrated by lantern-slides.

2. The Rev. F. C. R. Jourdain will show some slides of Lake Huleh, Palestine.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXV.

THE three-hundred-and-seventieth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, February 21, 1934.

Chairman : Mr. D. A. BANNERMAN.

Members present :—Dr. W. J. ADIE; W. B. ALEXANDER; E. C. STUART BAKER; F. J. F. BARRINGTON; P. F. BUNYARD; H. P. O. CLEAVE; Maj.-Gen. Sir P. Z. COX; Miss J. M. FERRIER; H. A. GILBERT; Miss E. M. GODMAN; Capt. C. H. B. GRANT; Col. A. E. HAMERTON; Dr. J. M. HARRISON; Mrs. C. HODGKIN; Rev. F. C. R. JOURDAIN; N. B. KINNEAR; Miss E. P. LEACH; Dr. G. CARMICHAEL LOW (*Editor*); Dr. P. R. LOWE; Dr. N. S. LUCAS; C. W. MACKWORTH-PRAED (*Hon. Sec. & Treas.*); Lt.-Col. H. A. F. MAGRATH; Dr. P. H. MANSON-BAHR; G. M. MATHEWS (*Vice-Chairman*); J. G. MAVROGORDATO; C. OLDHAM; Miss G. RHODES; W. L. SCLATER; D. SETH-SMITH; Dr. A. LANDSBOROUGH THOMSON; Dr. C. B. TICEHURST; B. W. TUCKER; H. F. WITHERBY; C. G. M. DE WORMS.

Guest of the Club :—K. J. PALUDAN.

Guests :—Brig.-Gen. R. M. Betham; Mrs. Gilbert; L. A. Hawkins; M. Meynell; K. Newall; Mrs. Oldham; Lt. C. Sclater, R.N.; N. White.

Mr. B. W. Tucker gave an account, illustrated by lantern-slides, of an ornithological trip to Ireland made by Mrs. Tucker and himself, in company with Mr. H. J. R. Pease, in the summer of 1933. They crossed from England on June 24 and spent a fortnight in the country, during which, through the kindness of Mr. L. J. Turtle, of Belfast, and other Irish ornithologists, they were able to see something of most of the more noteworthy Irish breeding species.

Lantern-slides were shown of the main Irish colony of Roseate Terns, where a careful census taken in 1932 showed a breeding population of approximately 500 pairs. All the other British breeding Terns were also seen nesting.

Rathlin Island was visited to see Choughs and sea-bird colonies.

One of the most interesting excursions was to the very remarkable breeding colony of Black-necked Grebes recorded by Messrs. Stoney and Humphreys in ' British Birds,' xxiv. 1930, pp. 170–173, which was visited through the kindness of these gentlemen. Here a very large number of these birds breed under colonial conditions in the sedge and reed-beds of a remote lough. The numbers in 1933 were probably below the average owing to the low level of the water, which left the greater part of the main reed-bed high and dry, but they were still very considerable.

The Red-necked Phalarope colony and the breeding haunt of the Common Scoter were also described. Broods of young were seen in both places. The watcher on the Phalarope ground estimated the number of breeding pairs present as 40, while in the Scoter locality the numbers have increased from one pair in 1905 to about 30 in 1933.

Observations were also made on the Irish Jay, Irish Coal-Tit, Woodcock, Siskin, Crossbill, and other species. The

variability in colour of Irish Coal-Tits observed in Co. Wicklow was very striking, and it was doubtful whether many individuals seen could be differentiated in the field from the British form.

The Rev. F. C. R. Jourdain exhibited a selection of slides showing scenery in Palestine and Syria. The introductory slides showed the characteristics of the barren Judæan highlands, contrasting with the Dead Sea depression and the lower Jordan Valley. At Lake Huleh, in the upper part of the valley, a series of slides illustrated the great papyrus marsh, which is inhabited by a small tribe of Arabs who are dependent entirely on the papyrus crop for their livelihood. There is a herd of Buffalo here, now reduced to about 1500. The harvesting and drying of the papyrus crop were shown on the screen, and some description was given of the bird-life of the swamp, which has rarely been visited by an Englishman. It is remarkable that the little papyrus rafts on which these Arabs traverse the swamp are very similar to those figured in ancient Egyptian hieroglyphics.

A few slides of Syrian scenery were also shown, including views of the water gardens of Damascus and the effects of the bombardment during the trouble with the Druses, as well as street scenes during a Moslem feast; and the last slides showed the wonderful ruins at Baalbek and a typical street scene in a hill-village in the Libanon.

Mr. W. B. Alexander showed slides of Heligoland and gave an account of the Bird Observatory there and its work. He also contributed the following notes on migrants and migration seen during his visit:—

Up to the present time 421 species or subspecies of birds have been recorded on Heligoland, the latest addition to the list being a small Thrush (*Turdus unicolor*), shot there on Oct. 15, 1932. It is an inhabitant of the Himalayan region, and has never previously been obtained in Europe.

Of these 421 birds, only one, the House-Sparrow (*Passer domesticus*), is a resident. It has been claimed that the Sparrow is a parasite on the horse, but there are no horses or cattle on Heligoland, and the birds here seem to depend to a great extent on the food supplied to poultry, supplemented by scraps obtained round the houses and the harbour.

Apart from the Sparrows, five species have bred regularly on Heligoland in recent years. At one part of the cliff there is a colony of about 1000 pairs of Guillemots and a few Razorbills. Starlings have nested in gradually increasing numbers since about 1880, but depart after breeding. Since 1924 the British race of the Yellow Wagtail (*Motacilla flava rayi*) has nested each year on Dune Island amongst the marram-grass, whilst the White Wagtail has nested since 1927 on Heligoland itself. In 1929 and 1931 the male of one of the breeding pairs was a Pied Wagtail (*M. a. lugubris*).

Over 100 years ago Herring-Gulls, Kittiwakes, and Puffins also nested on the cliffs, and Oyster-catchers on Dune Island. Other birds which have bred occasionally are the House-Martin, Wheatear, Sky-Lark, Tree-Pipit, Chaffinch, Lesser Redpoll, Black Redstart, and Whitethroat, but the birds or their nests have usually fallen victims to the cats with which the island swarms.

The attraction of Heligoland to the ornithologist is, of course, its fame as a station where migration can be observed and studied on a large scale. Our visit from Sept. 18 to Oct. 4, 1933, was planned in the hope that in that period we should see something of the latter part of the migration of Flycatchers, Warblers, and other insectivorous birds, and the beginning of the migration of Thrushes, Finches, and Crows. The period proved to have been well chosen, since in seventeen days we saw 82 species of land-birds and shore-birds on or over the island, in addition to 21 species of aquatic birds seen on the water or flying past, or from the steamer, on our voyages to and from the island from Cuxhaven. With the addition of the resident Sparrow this makes 104 species.

The great majority of the species undoubtedly performed their migrations at night. Unfortunately during our stay

the nights were always clear, even though it was sometimes foggy in the daytime, and we never had the good fortune to see birds attracted to the lighthouse, though we had secured permits to enable us to visit the gallery of the light in case opportunity arose. On some evenings the revolving beams frequently illuminated one or two birds at short intervals as they passed near, but the light did not attract them. A single flash as the rays were reflected from the plumage of the bird was all that could be seen, and the identity of the bird could not even be guessed.

Every morning a survey of the island showed that new birds had arrived and others had departed during the night. We made estimates of the numbers of birds of each species present on the island each day, as well as of the numbers on Dune Island whenever we visited it. The following were the species which were present in the largest numbers :—

On Heligoland:

Species.	Nos.	Dates.
Chaffinch	300	Sept. 23 & 24.
Meadow-Pipit	250	Sept. 21 & 22.
Song-Thrush	120	Oct. 1.
Robin	120	Oct. 3.
Redstart.....	100	Sept. 23.
Hedge-Sparrow	100	Sept. 29 & 30.
Wheatear	70	Sept. 19.
Starling	70	Sept. 29.
Chiffchaff	60	Sept. 22.
Tree-Pipit	50	Oct. 3.
Sky-Lark	40	Oct. 1.
Rock-Pipit	40	Oct. 1.
Goldcrest	40	Oct. 3.
Siskin	30	Sept. 23.
Brambling	30	Oct. 1.

On Dune Island:

Dunlin	100	Sept. 21.
Meadow-Pipit	60	Sept. 24 & 25.
Tree-Pipit	60	Sept. 30.
Sanderling	50	Sept. 21–26.
Wheatear	50	Sept. 24 & 25.
Ringed Plover	40	Sept. 25.

The greatest numbers, both of species and of individuals, seen during our stay on Heligoland were recorded on Sept. 23. Up to that date we had experienced easterly winds, but during the night of the 22nd the wind went round to the south-west, and at daybreak on the 23rd there was a brief but heavy shower of rain. This break in the weather and adverse wind evidently caused more birds than usual to alight on the island. We saw 42 species, and estimated that there were 957 individuals present. Chaffinches and Redstarts swarmed everywhere; Siskins, Pied Flycatchers, Garden-Warblers, Willow-Wrens, and Fieldfares were seen in greater numbers than on any other date; a Dotterel was seen on the highest point of the island, and an adult male Red-breasted Flycatcher was captured.

After a further spell of easterly winds another check to migration occurred on Oct. 1, when it came on foggy during the early hours of the morning, and the fog only lifted about 11 A.M. On that date we saw birds of 39 species on Heligoland and of 29 species on Dune Island. Song-Thrushes, Sky-Larks, Bramblings, and Rock-Pipits were more numerous than on any other date; several Blackcaps, a Garden-Warbler, and a Whitethroat were noted, though these species had not been seen for several days previously; the first Shore-Lark appeared, two more Red-breasted Flycatchers were seen, and a Goshawk spent some time circling about over Dune Island.

After the fog lifted it remained as a pall overhead for some time, and during this period numerous small flocks of Song-Thrushes, Rock-Pipits, Sky-Larks, and Bramblings were seen to leave the southern point of the island and fly off to the south at a comparatively low elevation over the water. It seems pretty certain that the reason why birds of these species were not seen leaving the island on other occasions was because during clear weather they rose to a much greater height before taking off.

Except on this occasion, the only land-birds seen flying past or over the island during the daytime were Hawks, Swallows, and Crows. Kestrels were seen passing on several dates flying steadily southwards, without paying any attention to the island, and always solitary. Peregrines, Merlins,

and Sparrow-Hawks, on the other hand, generally broke their journey to hunt round the cliffs, and Sparrow-Hawks were more than once seen in pursuit of small birds, several even chasing them into the traps and being captured.

Swallows in smaller or larger flocks were seen passing almost every day, but they, too, usually stopped for a time to hawk about the cliff-faces or over the lower ground. House-Martins were much less numerous, and Sand-Martins only occasional.

On our last day, Oct. 3, we were fortunate in seeing a considerable migration of Hooded Crows. The first flock appeared about 7 A.M. over the sea to the east and passed over the island, flying due west. Other flocks followed at intervals throughout the day in scattered groups, slowly and silently, at an altitude of perhaps 500 feet above the sea. Though the intervals between the flocks were usually much too great to allow of their following one another by sight, the majority followed exactly the same east-to-west line across the island. One or two flocks swerved from their course in the neighbourhood of the island, and one appeared to contemplate settling upon it, but the reception they received from the local sportsmen as they approached speedily induced them to change their minds. One Heligolander assured us that they were just as good to eat as Woodcock. During the day we counted 311 Hooded Crows passing over, but numerous flocks undoubtedly passed unobserved by us. In one of the flocks there were four Jackdaws. The movement was apparently not continued on the following day—at least no flocks were seen up to 10 A.M., when our boat sailed, and we saw none on our voyage to the mainland.

Finally, it seems worth recording the appearance of certain species on Heligoland which we do not usually think of as migrants. Wrens were seen almost daily, and on Oct. 3 and 4 were present in considerable numbers. A Blue Tit was noted on Sept. 26, and two on the following day. A Coal-Tit seen on Sept. 24 was, perhaps, the most unexpected addition to our list of birds encountered on Heligoland. A Corn-Bunting was observed on Sept. 30, and single Yellow-Hammers on Sept. 23 and Oct. 3. Stock-Doves occurred several times.

Mr. David Bannerman sent the following communication with reference to the range of *Anthus pallidiventris* Sharpe :—

Through the kindness of Professor Dr. Gestro I have been able to examine three specimens of a Pipit, now in the Museo Civico di Storia Naturale, Genoa, which had been collected by Signor Fea in Portuguese Guinea in 1899, and had been recorded several times in literature, notably by Count Salvadori in 'Annali Museo Civico di Storia Naturale,' xl. ser. 2, vol. xx. 1901, p. 763; by Bocage in Journ. Acad. Sci. Lisboa, ser. 11d, vi. 1901, p. 167; and by Dr. Reichenow in his 'Vögel Afrikas,' iii. pp. 319, 320, as *Anthus pallidiventris* Sharpe.

As I suspected, the specimens from Farim and Bissao in Portuguese Guinea have nothing whatever to do with *A. pallidiventris*, a large-billed, white-bellied species described from Gabon, of which the type and four other examples from French and Portuguese Congo are in the British Museum. Mr. Sclater wisely omitted Portuguese Guinea from the range of *A. pallidiventris* when compiling the 'Systema Avium Æthiopicarum,' but he did not examine the specimens.

Although not in full agreement with Mr. Sclater as to the ranges he accepts for the various subspecies of the Plain-backed Pipit, it can be seen at a glance that the three specimens—no. 42, ♂, Bissao, 2. ii. 99; no. 44, ♀, Bissao, 26. i. 99; and no. 123, ♀, Farim, 17. iv. 99—collected by Signor Fea are a subspecies of *Anthus leucophrys*, and I would refer them to the race *Anthus leucophrys zenkeri*.

I consider that the range of this Pipit extends from Senegal to the Upper Uele River, N. Nigeria, N. Cameroon, and Darfur, whereas *Anthus leucophrys gouldii* should be restricted to the coastal regions of the forested countries from Sierra Leone to the Ivory Coast.

Having had the privilege of comparing the specimens from the Genoa Museum with the type of *A. pallidiventris*, it seems to me to be of sufficient importance to put this on record in order to prevent any further errors in the range of *A. pallidiventris* appearing in literature.

Mr. Bannerman also sent the description of a new race of the Blackcap Akalat from Fernando Po, which he proposed to name

Illadopsis cleaveri poensis, subsp. nov.

Description.—Differs from *I. cleaveri batesi* in its darker coloration, particularly on the mantle and back, which has a dusky chestnut tinge, the upper tail-coverts more rufous chestnut, the breast browner, and the sides of the body more inclining to chestnut-brown. This deeper coloration is apparent even in the nestling, which at the same stage of development has more brown and less white on the underparts and darker upper-parts.

Measurements.—Adult male : bill 15·5; wing 76; tail 52; tarsus 28 mm.

Distribution.—Fernando Po (Bakaki and Bubi Town, Banterbari).

Type.—In the British Museum. ♂ ad., near Bakaki, Fernando Po, November 19, 1902. Boyd Alexander Coll. Brit. Mus. Reg. no. 1911.12.23.2371.

Remarks.—Another male, with the centre of the breast grey and sooty brown patches on either side, apparently adult, measures : bill 15; wing 77; tail 55; tarsus 28·5 mm.

Mr. N. B. Kinnear sent the following description of a new race of Long-tailed Wren from Bhutan :—

Spelæornis souliei sherriffi, subsp. nov.

Description.—Similar to *Spelæornis s. souliei*, but darker above, and the white spots on the head and scapulars of a more pure white, and not tinged with buff as in that bird; this is especially noticeable on the sides of the head. Ear-coverts whitish, and not pale buff. The throat and breast are pure white below, and not mixed with buff as in *souliei*, but this difference may be due to age; belly and abdomen darker brown, not so rufous, and the bars on the wings browner

and not so grey. In *Spelœornis s. rocki* the upper surface is still paler, more rufous, than *souliei*, and the spots stand out even less, since they are more buffy and less white than in the latter bird. Below, the only difference appears to be the paler, less rich colour. Ear-coverts as in *souliei* and the bars on the primaries grey, greyer than in *souliei*, but not greyish-buff as in the Bhutan bird; the tail also is paler than in either of the other races.

M. Berlioz, who has kindly compared one of the Bhutan birds with the type of *Spelœornis souliei souliei*, remarks on the more rufous colour in the type, the restriction of white on the throat, and the greyer colour of the bars on the wings.

Spelœornis s. sherriffi is readily distinguished from *S. s. rocki* by the darker colour and whitish ear-coverts, but the differences between it and *S. s. souliei* are not so marked; the colour of the ear-coverts will, however, always be a distinguishing character.

Measurements.—

	Wing.	Bill from skull.	Tail.	Tarsus.
♂	47	11	50	20
♀	47	11·5	50	20·5
?	49	11·5	50	20
♂, Yunnan.....	51	12·5	50	21
?, *rocki*	49	12·5	49	21·5

Type and *Distribution*.—♂, Dongma La, between Lingste and Trashi Yangtsi, East Bhutan, 10,500 ft., July 25, 1933, no. 2071. Collected by Messrs. F. Ludlow and G. Sherriff. Brit. Mus. Reg. no. 1933.11.16.34. A female was also obtained at the same place, and an unsexed skin at Pang La, further east, on August 13.

Mr. J. L. Peters, of the Museum of Comparative Zoology, Cambridge, Mass., kindly lent me a specimen of *S. s. rocki* for comparison.

The distribution of the other races is as follows :—

S. souliei souliei Oust., Bull. Mus. d'Hist. Nat. Paris, no. 6, 1898, p. 257. Type-locality, Tsekou, N.W. Yunnan. Range, Yunnan west of the Mekong.

S. souliei rocki Riley, Proc. Biol. Soc. Washington, xxiv. 1929, p. 214. Type-locality, Hofpuing Mts., near Litiping, Yangste–Mekong watershed, N.W. Yunnan. Range, Yunnan east of the Mekong.

Captain C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following notes on type-localities :—

1. The exact type-locality for the South African Black Kite, Milvus migrans parasitus (Daudin).

In the Syst. Av. Æthiop. i. 1924, p. 58, Sclater has given the type-locality as South Africa, and this has been followed by both Bannerman, Bds. Trop. W. Afr. i. 1930, p. 227, and Chapin, Bds. Belg. Congo, i. 1932, p. 551, although Claude Grant gave " Cape Colony, ex Levaillant," in ' The Ibis,' 1915, p. 248. This has caused us to enquire further into this question, and we find that an even more definite locality than Cape Colony can be fixed.

Daudin, Traité d'Orn. ii. 1800, p. 150, bases his description on the plate no. 22 in Levaillant's Ois. d'Afr. 1799, p. 88, and quotes Levaillant's localities. Levaillant says that he found this Kite in all parts of Africa that he visited, but first definitely mentions " les Caffres."

Reference to the map in Levaillant's ' Travels ' (1783 to 1785), i. 1796, p. 1, shows that " les Caffres " was that part of South Africa east of the Great Fish River now known as the Peddie, East London, and King William Town Divisions, and we are of opinion that the exact type-locality for *Milvus migrans parasitus* (Daudin) can be fixed as the Peddie Division, Cape Province, South Africa.

2. On the correct Type-locality for the Booted Eagle, Hieraaëtus pennatus (Gmelin).

In the Syst. Av. Æthiop. i. 1924, p. 61, Sclater gives " no locality indicated," and as we cannot find that any author has designated a type-locality for this Eagle, it seems to us desirable that one should now be fixed. The following are the earliest references to this bird :—

1788. *Falco pennatus* Gmelin, Syst. Nat. i. pt. i. 1788, p. 272 : no locality given, but two references to

1760. Brisson, Orn. vi. 1760, App. p. 22, App. pl. i. : no locality and no references.

1781. Latham, Syn. i. pl. i. 1781, p. 75, no. 55 : no locality, and refers only to Brisson as above.

As we cannot find any work previous to 1760 that mentions this bird, and as none of the above works help us, we must, in accordance with priority, seek for a locality in the earliest works published after 1788, and these are :—

1824. Vigors, Zool. Journ. i. 1824, p. 337 : no locality.

1824. Temminck, Pl. Col. i. 1824, pl. 33, who gives eastern parts of northern Europe, Hungary, Austria, and south Russia, and references to Brisson and Gmelin as above; also Latham, Index Orn. 1790, p. 19, sp. 34 : no locality; Cuvier, Reg. Anim. i. 1817, p. 323 : no locality.

We therefore have a choice of localities given by Temminck, and in one of the first two works published after 1788 and in which this Eagle is mentioned.

We know that this Eagle still occurs throughout the areas given by Temminck, and as "eastern parts of northern Europe" is somewhat vague, we suggest that the type-locality for the Booted Eagle, *Hieraaëtus pennatus* (Gmelin), be fixed as Hungary.

3. On the Type-locality of the Black-breasted Harrier-Eagle, Circaëtus pectoralis Smith, S. Afr. Quart. Journ. ser. 1, 1830, p. 109.

In the original description Smith gives no definite locality, nor any references to other works, except to note that this bird escaped the notice of Levaillant. Authors have therefore quoted South Africa as the type-locality. By 1830 travellers had only reached the Orange River and the country immediately north of that river, so that specimens seen and described by Smith would most likely have come from within the limits of Cape Colony. We therefore suggest that the type-locality of *Circaëtus pectoralis* Smith be fixed as Cape Province, South Africa.

4. On the exact Type-locality of the African Lammergeyer, Gypaëtus barbatus meidionalis Keys. & Blas., Wirbelth. Europ. 1840, p. xxviii.

Keyserling and Blasius based their *Gypaetos meidionalis* on two specimens from South Africa in the Berlin Museum.

Dr. Stresemann has kindly informed us, under date Dec. 20, 1933, that these specimens are still in the Berlin Museum, both being mounted. They bear the following data :—No. 354, Caffraria, Ludwig Krebs leg. (about 1825), and No. 355, Zondags-river, Mundt and le Maire leg. (about 1816).

Both specimens, therefore, came from the Cape Province, and as the oldest has a definite locality, we are of opinion that the exact type-locality for this race should be Sunday River, Cape Province, South Africa.

5. On the correct Type-locality of the South African Sparrow-Hawk, Accipiter rufiventris rufiventris Smith.

Sclater, Syst. Av. Æthiop. i. 1924, p. 68, gives South Africa ; Kirk Swann, Mon. Bds. Prey, v. 1926, p. 321, gives Baviaan's River, and this has been followed by Chapin, Bds. Belg. Congo, i. 1932, p. 636.

In the S. Afr. Quart. Journ. ser. 1, 1830, p. 231, Smith records his localities in the following order:—South-east coast, Baviaan's River; southern branches of the Orange River ; Constantia, Cape Town. In strict priority we consider that the correct type-locality for this Sparrow-Hawk must be South-East coast, Cape Province, South Africa.

6. On the exact Type-locality of the Gabar Goshawk, Melierax gabar (Daudin).

All authors have given " Interior of South Africa " as the type-locality of this Goshawk.

Daudin, Traité d'Orn. ii. 1800, p. 87, quotes Levaillant, Ois. d'Afr. i. 1799, p. 138, who says :—" Je n'ai trouvé le Gabar que dans l'intérieur des terres, sur les bords des rivières Swartekop et Sondag," etc. We are, therefore, of opinion that the exact type-locality for the Gabar Goshawk, *Melierax gabar* (Daudin), should be Zwart River, Graaf Reinet Division, Cape Province, South Africa.

Capt. C. H. B. Grant and Mr. C. W. Mackworth-Praed also sent the following note on the distribution of the Marsh-Harrier, *Circus æruginosus æruginosus* (Linnæus) :—

In recent years some doubt has arisen as to the record for Potchefstroom, Southern Transvaal, South Africa, given by Thomas Ayres in ' The Ibis,' 1871, p. 147. Sclater, Fauna South Africa, Bds. iii. 1903, p. 374, mentions this bird and one obtained by Sir Guy Marshall near Salisbury, Mashonaland.

This latter bird we cannot trace as being still in existence. In the Syst. Av. Æthiop. i. 1924, p. 74, Mr. Sclater says : " doubtfully recorded from the Transvaal."

Through the kindness of the Curator of the Norwich Castle Museum we have examined Thomas Ayres' specimen (no. 10/3606), which is a male in first dress, and is an undoubted specimen of the Marsh-Harrier. Therefore the Transvaal can be included in the distribution without any further doubt, and we can accept Marshall's record as being this species.

Mr. Gregory M. Mathews sent the following description of a new subspecies of Royal Albatross from the Atlantic :—

Diomedea epomophora longirostris, subsp. nov.

Description.—Differs from *D. e. epomophora* in its much longer bill—178–182 mm.

Distribution.—Off the east coast of South America from Uruguay to the Horn.

Type-locality.—South Atlantic Ocean.

Remarks.—The longest bill of *D. e. epomophora* from off New Zealand measures 170 mm., and *D. e. sanfordi* from Chile has a bill-measurement of only 150. In forty specimens the eyelid is black, in contrast to the coloured eyelid of *Diomedea exulans* and its subspecies.

NOTICES.

The next Meeting of the Club will be held on Wednesday, March 14, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m. Members are reminded that this Dinner is held conjointly with the Annual Dinner of the British Ornithologists' Union.

The Meeting will be devoted to the exhibition of films and lantern-slides.

Members of the B. O. C. intending to dine should inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, and not the Secretary of the Union. This notice is necessary in order that the seating may be arranged beforehand, and failure to comply with it may result in no seat being available.

Agenda.

The following exhibits will be shown :—

Lantern-slides.

1. Dr. P. A. Buxton. Photographs of ornithological interest from the northern part of Nigeria.
2. Mr. Ian M. Thomson. Some Birds of Shetland and Holland.

Films.

3. Mr. T. A. Glover. Some African Birds and Animals.
4. Mr. D. Seth-Smith. Humming-Birds.
5. Mr. F. S. Chapman. Views of Greenland.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXVI.

The three-hundred-and-seventy-first Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, March 14, 1934, in conjunction with the Annual Dinner of the British Ornithologists' Union.

Mr. H. F. Witherby, the President of the B. O. U., took the Chair during the Dinner, and Mr. D. A. Bannerman, Chairman of the Club, during the subsequent proceedings.

Members of the B. O. C. present:—Miss C. M. Acland; Capt. B. Acworth; Dr. W. J. Adie; W. B. Alexander; C. S. Ascherson; E. C. Stuart Baker; Miss P. Barclay-Smith; F. J. F. Barrington; Miss M. G. S. Best; G. B. Blaker; Miss R. Blezard; S. Boorman; H. B. Booth; A. W. Boyd; P. F. Bunyard; Hon. G. L. Charteris; H. P. O. Cleave; Maj.-Gen. Sir P. Z. Cox; R. H. Deane; Lt.-Col. A. Delmé-Radcliffe; A. Ezra; Miss J. M. Ferrier; Dr. K. Fisher; H. A. Gilbert; W. E. Glegg; A. G. Glenister; Miss E. M. Godman; R. E. Heath; P. A. D. Hollom; Rev. F. C. R. Jourdain; N. B. Kinnear; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); Dr. P. R. Lowe; Dr. N. S. Lucas; T. H. McKittrick, jun.; C. W.

Mackworth-Praed (*Hon. Sec. & Treas.*); Dr. P. H. Manson-Bahr; G. M. Mathews (*Vice-Chairman*); W. G. Mavrogordato; W. N. May; Col. R. Meinertzhagen; Mrs. D. Micholls; J. L. Chaworth Musters; B. B. Osmaston; Miss G. Rhodes; R. G. C. C. Sandeman; W. L. Sclater; D. Seth-Smith; Major M. H. Simonds; Major A. G. L. Sladen; H. Stevens; C. G. Talbot-Ponsonby; Dr. A. Landsborough Thomson; B. W. Tucker; H. Whistler; C. G. M. de Worms.

Members of the B. O. U. present :—Lt.-Col. F. M. Bailey; Brig.-Gen. R. M. Betham; Dr. P. A. Buxton; Miss B. A. Carter; Mrs. E. Stafford Charles; A. H. Evans; S. H. Hart; A. G. Haworth; Miss A. Hibbert-Ware; G. C. S. Ingram; Miss E. M. Knobel; Mrs. M. L. Lemon; Lt.-Col. W. A. Payn; W. H. Payn; W. J. P. Player; Miss D. T. Raikes; W. E. Renaut; Dr. F. G. Swayne; Miss D. L. Taylor; Mrs. R. Tenison; I. M. Thomson; N. Tracy; Capt. L. R. Waud; Capt. W. B. Incledon Webber.

Guests of the Club :—Mr. F. S. Chapman, Mr. T. A. Glover; Mrs. T. A. Glover.

Guests :—Mrs. C. S. Ascherson; Mrs. E. D. Atkins; Mrs. F. M. Bailey; Mrs. E. C. Stuart Baker; Dr. Banks; Mrs. R. M. Betham; D. Blackie; J. R. W. Blathwayt; Mrs. W. Boyd-Watt; Miss P. Brownrigg; J. T. H. Bulman; Mrs. P. A. Buxton; R. H. Calvert; Miss F. Cameron; M. Campbell; J. Clay; Lady Cox; H. B. Curwen; S. L. Forbes; H. Gaster; Mrs. H. A. Gilbert; Mrs. A. L. Godman; Miss C. E. Godman; C. L. Green; Mrs. A. G. Haworth; F. E. Lemon; G. Little; R. M. Lockley; Mrs. G. Carmichael Low; Mrs. N. S. Lucas; Miss Lynes; Mrs. C. W. Mackworth-Praed; Major W. Mareuse; Mrs. N. May; Mr. R. Murray; D. M. Murray-Rust; Knud Paludan; W. H. Perrett; F. Pike; Miss E. Joyce Preston; H. M. Salmon; Miss Sandback; Lady Savory; Mrs. W. L. Sclater; Mrs. Selby; Miss R. Seth-Smith; Mrs. M. H. Simonds; Mrs. A. G. L. Sladen; Miss B. N. Solly; Capt. I.

Stewart-Liberty; Mrs. I. Stewart-Liberty; Lady Mary Strickland; Sir Gerald Talbot; Mrs. A. Landsborough Thomson; Mrs. B. W. Tucker; J. Vincent; Major G. A. Wade; T. Wake; Miss B. Incledon Webber; N. White; Mrs. N. White; R. Williams-Ellis; Mrs. H. F. Witherby; R. C. F. Witherby.

Members of the B. O. C. 59; Members of the B. O. U. 24; Guests of the Club 3; Guests 64; and 9 others. Total 159—a record number for this Dinner.

The programme for the evening was devoted to the exhibition of slides and cinematograph-films. The first exhibitor was Dr. P. A. Buxton, who showed a series of slides of ornithological interest from the northern part of Nigeria. These illustrated very strikingly the differences in the topographical features of the country during the dry and wet seasons. Amongst the slides shown was one depicting the nest of the Hammer-headed Stork or Hammerkop (*Scopus u. umbretta*), and another a collection of Vultures (*Necrosyrtes m. monachus*) eating the offal from slaughtered animals outside Kano.

Mr. Ian Thomson showed slides illustrative of bird-life in Shetland and Holland. Those from Shetland included the Great Skua (*Catharacta s. skua*), Richardson's Skua (*Stercorarius parasiticus*), Fulmar Petrel (*Fulmarus g. glacialis*), and the Red-necked Phalarope (*Phalaropus lobatus*) with its nest; those from Holland the Black-tailed Godwit (*Limosa l. limosa*) with its nest, the Avocet (*Recurvirostra avosetta*) with its nest, the Kentish Plover (*Charadrius a. alexandrinus*), and the nest of the Purple Heron (*Ardea purpurea*). Mr. Thomson must be heartily congratulated on the excellence of his photographs, and those who have also seen his photographs in ' Birds from the Hide,' published last year, will realize that the author is a bird-photographer of exceptional merit.

After the exhibition of the slides a series of films was shown, the first of these being one taken by Mr. T. A. Glover

and his wife during a journey across Africa from Senegal to Italian Somaliland. The complete film of this tour was shown by Captain Andrews, another member of the party, before the Royal Geographical Society lately, and came in for very high praise. Mr. Glover himself showed the audience the part of the film dealing with birds and mammals. Amongst the birds were Abdim's or the White-bellied Stork (*Sphenorynchus abdimii*), the Sacred Ibis (*Threskiornis æ. æthiopicus*), Buff-backed Herons or Cattle-Egrets (*Bubulcus ibis*), Pink-backed Pelicans (*Pelecanus rufescens*), all nesting in trees, and Lesser Flamingoes (*Phœniconaias minor*) on Lake Elmenteita, East Africa; amongst the mammals remarkable scenes depicting Giraffes (*Giraffa camelopardalis*), White-bearded Gnus (*Connochætes taurinus albojubatus*), Zebras (*Equus burchellii*), and Gazelles, Thomson's and Grant's (*Gazella thomsoni* and *granti*) in their natural homes. The destructive effects of enormous flights of Locusts were also well shown on the film.

Mr. D. Seth-Smith showed a film of the Humming-Birds in the Zoological Gardens. Since last May the Zoological Society has received three consignments of these birds, and there are now no less than thirty belonging to various species alive in the Gardens. This is the first time a series of Humming-Birds has been kept for any length of time in captivity. The appearance of these charming little creatures hovering over the flowers of an orchid and over their ingeniously constructed feeding-bottles made a delightful picture.

Mr. F. S. Chapman showed a remarkable film of views of Greenland. He was the ornithologist on the first British Arctic Air-route Expedition which visited Greenland in 1930–31, and again on the expedition of 1932–33, when the leader and organiser of both expeditions, Gino Watkins, lost his life. After Watkins's tragic death the geographical work of the expedition was carried on by Mr. Rymill and Mr. Chapman, who brought it to a highly successful conclusion. The pictures of the dogs drawing the sledges over the Great Ice Cap were particularly pleasing. Of birds, Glaucous Gulls

(*Larus hyperboreus*) and Iceland Gulls (*Larus glaucoides*) were common, while Ivory Gulls (*Pagophila eburnea*) were also seen, and on the Ice Cap Snow-Buntings (*Plectrophenax nivalis*) and Red-necked Phalaropes (*Phalaropus lobatus*) were encountered.

The enthusiastic applause with which the slides and films were received showed how much the audience had enjoyed the exhibits of the evening. They were all of a very high standard of merit.

Mr. Gregory M. Mathews sent the following description of a new genus of Storm-Petrel :—

LOOMELANIA, gen. nov.

Description.—Tarsus longer than the middle toe and claw, and almost twice as long as the culmen; the tail is forked for over 20 mm., and is just less than half the length of the wing.

Measurements.—The average measurements of 150 skins are: Wing 177; tail 85; culmen 15·7; tarsus 31; middle toe and claw 29·25 mm.

Type.—*Procellaria melania* Bonaparte.

NOTICES.

The next Meeting of the Club will be held on Wednesday, April 11, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1,

as soon as possible. The titles of their contributions will then appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

Dr. G. Carmichael Low will show :—

A series of skins of the Ringed Plover in winter plumage from near Stromness, Orkney Islands, and will make some remarks upon the race occurring there.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXVII.

The three-hundred-and-seventy-second Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, April 11, 1934.

Chairman : Mr. D. A. Bannerman.

Members present :—E. C. Stuart Baker ; Miss P. Barclay-Smith ; F. J. F. Barrington ; Brig.-Gen. R. M. Betham ; Miss R. Blezard ; S. Boorman ; P. F. Bunyard ; Mrs. E. Stafford Charles ; Hon. G. L. Charteris ; J. Delacour ; Miss J. M. Ferrier ; W. E. Glegg ; Miss E. M. Godman ; H. T. Gosnell ; Capt. C. H. B. Grant ; Col. A. E. Hamerton ; B. G. Harrison ; Dr. J. M. Harrison ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Dr. G. Carmichael Low (*Editor*) ; N. S. Lucas ; T. H. McKittrick ; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*) ; Dr. P. H. Manson-Bahr ; G. M. Mathews (*Vice-Chairman*) ; H. J. R. Pease ; Miss G. Rhodes ; W. L. Sclater ; D. Seth-Smith ; Major A. G. L. Sladen ; Marquess of Tavistock ; B. W. Tucker ; Mrs. W. Boyd Watt ; H. F. Witherby ; C. G. M. de Worms.

Guests :—Mrs. John Charles ; P. C. Hawker ; A. W. Vincent ; H. Boyd Watt ; G. Webster.

Mr. David Bannerman made some remarks on a collection of some 560 birds recently made in Ashanti, Gold Coast, by Mr. Willoughby P. Lowe for the British Museum, and exhibited a specimen of *Glaucidium tephronotum tephronotum*, the Gold Coast Yellow-legged Owlet, from Mampong. Mr. Bannerman said that no large collection from the forests of the Gold Coast had been made since Governor Ussher had employed Aubinn—a native collector—to obtain birds for him between the years 1867–1872. Although a number of very rare birds were secured in that collection, and finally were presented to the British Museum, none bore any data on the labels, the only locality mentioned being either Denkera (a spot which is not marked on modern maps, but which is situated in lat. 6° 15′ N., 2° 12′ W. long., south-west of Kumasi) or "the interior of the Gold Coast." It was imperative, therefore, that we should have confirmation of Ussher's records, and arrangements were made with Mr. W. P. Lowe, with the aid of the Godman Fund, to spend three months in Ashanti from December 1933 to March of this year. Mr Lowe's collection contains a number of rare species, but a cursory glance has not revealed anything entirely new. By far the greatest prize is a female specimen which had just finished laying of

Glaucidium tephronotum tephronotum Sharpe,

which was secured on February 25, 1934, at Mampong, Ashanti. This bird was hitherto known from the unique type in the British Museum, described in 1875 by Sharpe from eighteen birds sent to the British Museum by Mr. William Saunders and labelled "S. America." As already foreseen by Drs. Hellmayr and Chapin, it was evidently recorded wrongly as coming from South America. I took the precaution to include a description of this Owlet in my third volume of the 'Birds of Tropical West Africa,' in a footnote on pp. 31–32, and the discovery of the bird at Mampong, in Ashanti, is pleasant confirmation of what I then wrote.

As the soft parts of the bird (described in 'The Ibis,' 1875, p. 260, and figured in the 'Catalogue of Birds,' ii. 1875, pl. xiii.) have never been given, I append these, taken from the label

of Mr. Lowe's specimen :—Eye yellow ; bill greenish-yellow ; feet orange ; claws greenish-yellow at base, tips black. Eyelids, upper half yellow, lower half dark green. Total length in the flesh 170 mm., expanse 380 mm. ♀ just finished laying, 25. ii. 1934 (W. P. Lowe's coll., no. 546).

Other rare birds exhibited, of which Mr. Lowe secured specimens, are :

The Black Dwarf Hornbill (*Lophoceros hartlaubi hartlaubi*), a rare species, of which few specimens are known.

The Long-tailed Hawk (*Urotriorchis macrourus macrourus*), three specimens of which were secured at Mampong and Ejura.

The Fernando Po or Fraser's Eagle-Owl (*Bubo poensis poensis*), two adults and an immature one being obtained—the first specimen I have ever seen in immature dress.

The Maned Owl (*Jubula lettii*), the first record from the Gold Coast ; previously not known from any locality between Liberia and Cameroons.

An account of Mr. Lowe's trip, together with an annotated list of the specimens he secured, will, it is hoped, be published in ' The Ibis ' in due course. The passerine birds, which have not yet been named, are likely to prove of considerable interest, and the collection as a whole is a valuable asset to our West African material in the British Museum.

Mr. Bannerman made some further remarks with regard to the distribution of Ducks in Africa :—In a recent number of the ' Bulletin '* Dr. P. R. Lowe recorded for the first time the occurrence of the Hottentot Teal (*Anas punctata*) from Hadejia, Kano Province, Nigeria. I have now received two further specimens from the same source—evidently the species is by no means rare in the locality. Mr. Leslie, who sent the skins, believes that it breeds there, but as yet he has been unable to obtain confirmation.

Of particular interest is a record of the Tufted Duck (*Nyroca f. fuligula*), shot in February 1934, also in the Kano Province of Nigeria at Hadejia by Mr. S. A. Leslie. This is a new record for West Africa. The skin, an adult female,

* Bull. B.O.C. liv. 1933, p. 72.

was sent to myself at the British Museum for identification and has been presented to the Collection (Brit. Mus. Reg. no. 1934.4.13.1).

Mr. Bannerman also recorded, for the first time, the occurrence of the Garganey (*Anas querquedula*) from Nyasaland, and said :—The British Museum has recently received an adult male and female Garganey (the male being in eclipse plumage) from Mr. W. D. Lewis, of Mudi Estate, near Lilongwe, which were shot on January 13 and 14, 1934, during a duck-shoot at a point where the Mudi River joins the Bua River. The occurrence of the Garganey so far south in Africa has not hitherto been noted. It is known to reach Tanganyika Territory in winter, but the present record is a notable extension of its range, and the first from Nyasaland. Mr. Lewis writes to me that he is familiar with twelve species of duck in Nyasaland, and that when the Garganeys were shot—they were dropped by the same gun, but were each flying singly, fast and high—he immediately recognized them as new to the country. This instance is certainly worthy of record, as the Garganey is not included in Sir Charles Belcher's ' Birds of Nyasaland,' containing all species recorded up to 1930.

Mr. Bannerman concluded with the following remarks :—Perhaps it hardly seems worth recording, but I know now of three records of the Honey-Buzzard having occurred in Nyasaland. I mention it because Sir Charles Belcher omitted it (probably by mistake) from his ' Birds of Nyasaland.' There is one skin, at any rate, in the British Museum.

Mr. N. B. Kinnear exhibited, and made the following remarks on, a collection of birds made in Bhutan :—

The independent State of Bhutan is situated in the Himalayas on the eastern border of Sikkim, which it closely resembles in its climate and topography. The avifauna is very little known, and Europeans are not encouraged to enter the State.

During Major Pemberton's mission to the Court of Bhutan in 1837–38, a collection of birds was made under the supervision

of Dr. William Griffith, who accompanied the mission as botanist. No report was ever published on the birds, but Blyth, who saw the collection in Calcutta before it was sent to the East India Company's Museum in London, described one new species from it, and made a few remarks on others. The majority of the specimens appear in the Catalogue of the East India Company's Museum by Moore and Horsfield, and when that Museum was given up they were transferred to the British Museum.

Through funds supplied by the Godman Fund, Mr. F. Ludlow and Mr. G. Sherriff last year made an expedition to Bhutan, on behalf of the Trustees of the British Museum with the co-operation of the India Office, and were given every facility to travel by His Highness the Maharajah and his Prime Minister. The expedition entered Bhutan on the western border, and traversed the State as far as Trashiyangsi, some 30 miles from the eastern frontier; then, after crossing the Himalayas, returned to Sikkim *via* Gyantse and the Chumbi Valley.

In addition to birds and butterflies, plants and seeds were also collected, and many very interesting specimens of the latter were obtained. Of the birds, some 700 skins were sent home belonging to over 200 species. One new bird, a Long-tailed Wren (*Spelæornis soulei sherriffi*), described in the Bull. B. O. C. liv. 1934, pp. 107–108, was of special interest, since it is not only a new race, but is also a new species to the Himalayan Fauna, having only been previously recorded from Yunnan. Birds from Western Bhutan, as was to be expected, were the same as those from Nepal and Sikkim, but in the eastern parts of the State the species showed a tendency towards races from Yunnan and Szechuan, and, indeed, some cannot be distinguished from them. An interesting series, with adults and juveniles, was obtained of Molesworth's Blood-Pheasant (*Ithaginis cruentus tibetanus*), originally described by Mr. Stuart Baker from a specimen obtained during the Abor Expedition of 1914; also several specimens of Gould's Short-wing (*Heteroxenicus stellatus*), including one bird in juvenile plumage.

Dr. G. Carmichael Low showed a series of skins of the Ringed Plover (*Charadrius h. hiaticula*) in winter plumage, from near Stromness, Orkney Islands, which he had received from Mr. Thomas Towers of Stromness. The series, though small (said Dr. Low), was interesting in demonstrating which race inhabits these islands in winter. Seebohm, it will be remembered, differentiated two races of the Ringed Plover—a large and a small—the former resident in the British Isles, the latter from the Continent. The upper parts of the large race, he said, were paler in colour, and the legs and feet stouter. He named the large, or British race, *Charadrius hiaticula major*. Later, Dr. P. R. Lowe described the smaller Continental race as *Ægialitis hiaticola tundræ*= *Charadrius hiaticula tundræ*, and, still later, Schiöler suggested four races :—(1) The typical, *Ægialitis h. hiaticula*, colour of upper parts brown-grey, breeding in mid and south Sweden, Denmark, etc. (2) The north-eastern, *Ægialitis h. intermedia*=*Charadrius hiaticula tundræ*, colour of upper parts as in (1), but smaller, with bill and legs weaker, breeding in north Sweden, north Russia, and Siberia. (3) The English, *Ægialitis h. major*, quite like (1), the typical form, but with colour of back pale-grey, not brown-grey, breeding in the British Isles, and possibly on the coast of Holland, Belgium, and west France. (4) The Icelandic, *Ægialitis h. septentrionalis*, standing in size between the typical and (2), the north eastern, breeding in Iceland, Greenland, and possibly Spitsbergen. Dr. Hartert did not think there were sufficient points of distinction to distinguish (1), the typical race, *Charadrius h. hiaticula*, from (3), the English race, *Charadrius h. major*, and in this most English ornithologists agree.

The only point of distinction would seem to be in the colour of the back in breeding birds, *e. g.*, brown-grey for Scandinavian birds, pale-grey for British ; but, as the late Mrs. Meinertzhagen pointed out, British birds darken in colour in winter, and so the distinction is lost. The measurements are the same.

Further work has thrown doubt on (4), the Icelandic race, *Charadrius h. septentrionalis*, and, personally, I do not think this race can stand.

Unless some further points of distinction can be discovered for Scandinavian birds *versus* British birds (and for this summer-breeding specimens are required), then there will only be the two races of Ringed Plover :—

(1) *Charadrius hiaticula hiaticula*, with *Charadrius hiaticula major* as a synonym.

(2) *Charadrius hiaticula tundræ*, syn. *Ægialitis* [*Charadrius*] *hiaticula intermedia*.

All the birds in the series exhibited are of large size, *Charadrius h. hiaticula*, and not the northern or Siberian form, *Charadrius h. tundræ*. One cannot say, of course, whether the birds were born in Scandinavia and are only wintering in the Orkney Islands, or whether they are local, or even have come from the south, and will stay on and breed there.

The measurements (in millimetres) and details are as follows :—

No.	Locality.	Date.	Sex.	Age.	Wing.	Tail.	Bill from feathers.	Tarsus.
1.	Orkney, in the vicinity of Stromness.	8. ii. 1934	♂	Adult	133	65	15	25
2.	,,	26. ii. 1934	♂	Adult	136	67	16	26
3.	,,	26. ii. 1934	♂	Adult	136	65	15	25
4.	,,	26. ii. 1934	♂	Adult	139	69	16	26
5.	,,	27. ii. 1934	♂	Adult	134	65	16	25
6.	,,	27. ii. 1934	♂	Adult	133	65	16	26
			Wing : Average 135					
7.	,,	8. ii. 1934	♀	Adult	136	64	15	25
8.	,,	8. ii. 1934	♀	Adult	140	67	15	26
9.	,,	8. ii. 1934	♀	Adult	140	65	15	25
10.	,,	26. ii. 1934	♀	Adult	136	64	15	24
11.	,,	27. ii. 1934	♀	Adult	139	65	16	25
			Wing : Average 138					

Colour of upper parts distinctly dark ; brown-grey, not pale-grey.

Mr. J. Delacour and Mr. D. Seth-Smith gave some interesting details of the behaviour of Humming-Birds in captivity. Several consignments of these birds have recently been brought over from South America, and some of the specimens have been distributed amongst private collectors. Those at present in the London Zoological Gardens have lived now for a considerable time, and appear to be flourishing and in excellent health. Mr. Seth Smith, it will be remembered, showed a film of them at the March meeting (*antea*, p. 118).

The Rev. F. C. R. Jourdain made some remarks upon the breeding times of birds:—He said there was always a considerable amount of discrepancy between the breeding times of birds which nested apart, such as the Raven. This, however, could be explained to some extent by differences of climate and altitude. Thus on the south coasts of Devon and Wales full clutches might be expected in February, whereas in the mountainous districts of Central Wales they were usually found during the second or third week of March.

In the case of socially breeding birds, such as the Rook and various species of Tern, there was extraordinary unanimity within the colony, but differences in the average date also existed between different colonies.

Thus, of two rookeries in Wiltshire, about 15 miles apart, and under very similar conditions, one containing about 60 nests had full clutches on March 29, 1934. It had been examined during the previous week, and then contained incomplete sets of one to three or four eggs in most cases. On March 29 practically all the nests had full sets of fresh eggs; a few were still incomplete. The second rookery was a large one, and only about 30 nests were examined. Of these, some contained newly hatched young, in others the eggs were chipping, or very hard set, and only in a small proportion of nests were the sets incomplete, and in these cases dead Rooks were noticed below the trees. On the average there appeared to be a difference of nearly three weeks between the breeding time at the two places, and yet there was nothing in the environment to account for the difference. On previous occasions the speaker had noticed differences of a week or so between

the average dates at different rookeries, but this case seemed particularly noticeable. It would be interesting to see whether the difference held good in future years.

In the discussion which followed, the Marquess of Tavistock agreed that the matter was apparently psychological, and not dependent on external conditions, and Mr. E. C. Stuart Baker suggested that it might be a hereditary character. Major Sladen said he had noticed wide differences of the date of laying within a single rookery.

Captain C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following four notes :—

1. On the Races of the African Pigmy Falcons of the Genus Polihierax.

Sclater, Syst. Av. Æthiop. i. 1924, p. 56, recognizes only two races, i. e., *Polihierax semitorquatus semitorquatus* (Smith), Rep. Exp. C. Afr. 1836, p. 44 : Kuruman, Bechuanaland, and *Polihierax semitorquatus castanotus* (Heuglin), Ibis, 1860, p. 407 : near Gondokoro, Upper White Nile, Sudan, although Zedlitz, J. f. Ornith. 1914, p. 675, recognized four races, as does Bowen, Proc. Acad. Nat. Sci. Philad. lxxxiii. 1931, p. 257. Both Zedlitz and Bowen described new races. Friedmann, U.S. Nat. Mus. Bull. 153, 1930, p. 99, follows Kirke Swann, Syn. Accip. 1922, p. 183, and Sclater in recognizing only two races. On the other hand, van Someren, Nov. Zool. xxix. 1922, p. 44, whilst recognizing only two races, resurrects *P. s. homopterus* Oberholser (Lake Stephanie). These revisions and descriptions of new races have caused us to measure and examine the series of fifty-five specimens in the British Museum collection, which give the following wing-measurements :—

Bechuanaland (two specimens)	♂ 116, ♀ 119 mm.
Tanganyika Territory (one specimen).	♀ 126 mm.
Uganda (three specimens)	♂ 118, ♀ 118–119 mm.
Kenya (eight specimens)	♂ 112–127, ♀ 115–119 mm.
Somaliland (thirty-two specimens) ..	♂ 112–123, ♀ 111–121 mm.
Abyssinia (eight specimens)	♂ 115–125, ♀ 120–122 mm.
Sudan (one specimen)	♀ 118 mm.

These show that birds as far north as the Sudan and Abyssinia equal in size specimens from Bechuanaland, and when we see so great a variation as from 115 to 125 mm. in males from Abyssinia and from 111 to 121 mm. for females from Somaliland, we cannot but feel that this is a question of individuality, and not of race. The evidence before us inclines us to agree with those authors who recognize but two races, i. e., *Polihierax semitorquatus semitorquatus* (A. Smith), Rep. Exp. C. Afr. 1836, p. 44: Kuruman, Bechuanaland, and *Polihierax semitorquatus castanotus* (Heuglin), Ibis, 1860, p. 407: Méré Belenia, near Gondokoro, Upper White Nile, Sudan.

We have only been enabled to examine three specimens from South Africa, and one of these is moulting, but a comparison of these with birds from the northern limits of the range of this Falcon appears to show that, except for the northern form being, perhaps, on the average, larger, there is no very certain differentiating character.

2. On the Races of the Lizard-Buzzard, Kaupifalco monogrammicus (Temminck).

It has been generally accepted that two races occur in Eastern Africa, *K. m. monogrammicus* (Temminck), Pl. Col. livr. 53, 1824, pl. 314: Senegal, and *K. m. merid* (Hartlaub), Proc. Zool. Soc. 1860, p. 109: Ambriz, Angola, but as we can find no character whereby Eastern African specimens can be placed in either one race or the other, we have examined the series in the British Museum collection, including specimens from, or very close to, the type-localities of both races. Our critical examination shows that there is very considerable individual variation, and specimens from Angola, Nyasaland, Portuguese East Africa, and northern and southern Rhodesia can be found to match specimens from Senegal, the Gambia, and Sierra Leone, and it is not possible to find any definite character by which *K. m. merid* may be distinguished from *K. m. monogrammicus*. In view of this we are of opinion that only one form can be recognized as occuring from Senegal

and the Sudan south to Angola and Natal, and that *K. m. merid* must become a synonym. We append a list of wing-measurements, and would draw attention to the fact that a single white bar on the tail is not a constant character, as occasional specimens are found with two bars or indications of the second bar, and, rarely, in immature birds the white bar is faintly indicated.

Wing-measurements :—

West Africa, Senegal to Cameroons : 185 to 240 mm. ; Belgian Congo : 207 to 238 mm. ; Eastern Africa, Sudan to Tanganyika Territory : 207 to 240 mm. ; Angola : 218 mm. ; Southern Africa, Portuguese East Africa, Northern Rhodesia, and Nyasaland to Transvaal : 201 to 252 mm.

3. On the Status and Range of the South and East African Goshawks, Accipiter tachiro tachiro (Daudin) and Accipiter tachiro sparsimfasciatus (Reichenow).

The individual variation in these birds is such that it is extremely difficult to find any character by which the East African bird can be separated from the South African. We can only find one character, and this rather a poor one. As the East African bird has been given a name, this character is, perhaps, sufficient to support it, although we must rearrange the distribution.

Accipiter tachiro tachiro.

Tail with rather indistinct broad bars and some white spots in central area of feathers.

Range.—South Africa north to Angola, the lower Zambesi and Nyasaland.

Accipiter tachiro sparsimfasciatus.

Differs from *A. t. tachiro* in having less distinct bars on the tail, with no white spots, or the barest indication of them.

Range.—Zanzibar to Uganda, north-eastern Belgian Congo, Kenya Colony, and southern Somaliland.

Note.—*Accipiter tachiro unduliventer* (Rüppell) is confined to Abyssinia and Eritrea, and is distinguished by the clear bright chestnut thighs.

4. On the Races of the South African Marsh-Harrier, Circus æruginosus ranivorus (Daudin).

Kirke Swann, Mon. Bds. of Prey, iii. 1925, p. 129, supports *Circus æruginosus æquatorialis* Stresemann, Orn. Monatsb. xxxii. 1924, p. 48: Kiraragua, nr. Kilimanjaro, Tanganyika Territory, and gives the characters as smaller and as having the pale margins of the upper parts brighter rufous and the under parts deeper rufous. Our examination of the series in the British Museum collection does not support this. Measurements overlap, and some South African birds are brighter and deeper rufous than East African. We therefore recognize only one form from South Africa to Angola and Uganda. Wing-measurements are as follows :—

Uganda.	Tanganyika Territory.	Nyasaland.
mm.	mm.	mm.
♂. 370	—	362
♀. 368–377	377	330
? —	—	349
Three specimens examined.	One specimen examined.	Three specimens examined.

Bechuanaland.	Transvaal.	Natal.	Cape Colony.
mm.	mm.	mm.	mm.
♂. 382	351–381	357–363	349–376
♀. —	397–405	373–396	—
? —	348–368	373–376	376–391
One specimen examined.	Nine specimens examined.	Ten specimens examined.	Six specimens examined.

South Africa.	Kenya Colony.
mm.	mm.
♂. —	—
♀. —	—
? 351–383	355
Seven specimens examined.	One specimen examined.

Prof. Oscar Neumann (Berlin) sent a few remarks on the nomenclature, winter dress, and migration of some Palæarctic Gulls :—

The Gulls which von Heuglin collected in Zeyla, British Somaliland, and of which the head is figured in ' Ornithologie Nordost-Afrikas,' ii. 1873, pl. xxxvi. under the name of *Larus cachinnans* Pallas, was named *Larus heuglini* by Bree in ' Birds of Europe,' ed. 2, v. 1876, p. 58. This name was made a synonym of *L. cachinnans* by Saunders, ' Cat. Birds Brit. Mus.' xv. 1896, p. 268 (with a " ? " however), but without that " ? " by Dwight, ' The Gulls of the World,' 1925, p. 88, by Hartert, ' Vögel pal. Fauna,' 1921, ii. p. 1725, and by others.

A repeated and careful comparison of the type and cotype, which are preserved in the Stuttgart Museum, and were kindly lent me by Dr. Götz, with topotypical specimens of *L. a. cachinnans* from the Caspian and Lake Aral and with winter specimens of this race from the northern portion of the Red Sea, named *Larus leucophæus* by J. F. Naumann (*cf. infra*), show that it differs rather widely from all these. On the other hand, it agrees perfectly with winter birds from the southern half of the Red Sea, Djambo and Hodeida (Hemprich and Ehrenberg leg.), which are mounted in the Berlin Museum under the name of *Larus affinis* Reinhardt. It agrees further with a specimen from Buchara (Berlin Mus.), and in the proportions, pattern of the wing, and shape of bill with three specimens from the Taimyr Peninsula which I secured through exchange with the Leningrad Museum, and one from the Yenisei River kindly lent me by the authorities of the British Museum.

These, of course, are all *Larus argentatus taimyrensis* Buturlin. Thus it is evident that the latter name becomes a pure synonym of *L. a. heuglini* Bree.

The winter dress of *L. a. heuglini* is very different from that of *L. a. cachinnans*. I may refer, in regard to the former, to von Heuglin's magnificent plate, mentioned above, which is also copied in Bree's book. The winter dress of *L. a. cachinnans* has never these well-marked black stripes on the head and hind neck. The head, neck, and all the upper parts, which are white in the breeding dress, show grey patches

or blotches, resembling mist or clouds. In this dress *Larus cachinnans* was described as *Larus leucophæus* by J. F. Naumann, ' Naturgeschichte der Vögel Deutschlands,' x. 1840, p. 382.

Both in winter and in summer *L. cachinnans* differs from *L. heuglini* by having the light tongues on the inner web of the primaries almost white and not grey, and far better defined towards the black part ; further, by a longer bill and longer tarsus. The length of the wing is about the same, between 420 and 470 mm., but it seems that the body is larger in *L. a. cachinnans*.

I have also carefully compared the types of *L. heuglini* with two specimens of *L. a. antelius* Iredale from Obdorsk, on the lower Ob, but they belong certainly to the somewhat paler race from the Taimyr Peninsula and the Yenisei Bay.

L. a. heuglini migrates in winter through the whole of western Asia to the Persian Gulf, the southern Red Sea, and the northern Somali coast, while *Larus a. cachinnans* apparently remains in the northern half of the Red Sea, especially the Gulf of Suez.

It was questioned whether *L. heuglini* (=*taimyrensis*), *L. antelius*, and *L. atlantis* were races of *L. fuscus* or of *L. argentatus*. Hartert, ' Vögel pal. Fauna,' considered *L. atlantis* a subspecies of *L. argentatus* in controversy with Dwight, the author of that race, and *L. taimyrensis* (rectius *heuglini*), of which he makes *L. antelius* a synonym, a subspecies of *L. fuscus*.

Pleske, ' Birds of the Eurasian Tundra,' in ' Memoirs of the Boston Society,' vi. 1925, pp. 195–197, treats all these as subspecies of *L. argentatus*.

In my opinion there is one long chain of races, of which the terminal links are *Larus argentatus smithsonianus* and *Larus argentatus argentatus* at one end and *Larus britannicus* (or *graellsii*) and *Larus fuscus* at the other.

These are so much differentiated that they can live side by side in quite a small portion of the great area, which is inhabited by the species *L. argentatus*. I know from correspondence that this view is shared by Herr B. Stegmann,

of the Leningrad Museum, by whom an interesting article on this subject will be published in the July issue of the Journal für Ornithologie.

The race of *Larus argentatus* which inhabits the Mediterranean is always called, as far as it is acknowledged, *Larus argentatus michahellesii* Bruch, J. f. Ornith. 1853, p. 101 (*cf.* Hartert, ' Vög. pal. Fauna,' Nachtrag i. 1923, p. 86). Its true name, however, is *Larus argentatus michahellis* J. F. Naumann, ' Naturgeschichte der Vögel Deutschlands,' x. 1840, p. 382. Types in the Vienna Museum. Naumann quotes here another paper, said to be written by von Feldegg in Oken's ' Isis,' 1832, p. 1105. In this article, however, which is by Bruch also, and not by von Feldegg, the author proclaims his intention to name the Dalmatian Herring-Gull in honour of Dr. Michahelles. This dedicatory name does not appear, however, and the article runs under the heading of *Larus argentatus* L.

Captain C. R. S. Pitman, Game Warden, Uganda Protectorate, sent the following interesting note :—

On February 14, 1934, about 12 miles due west of Mbarara, in the Ankole District of south-west Uganda, a White Stork (*Ciconia c. ciconia*), while eating locusts, was killed by a dog. The District Commissioner of Ankole, Mr. F. Lukyn Williams, has very kindly supplied me with particulars of the inscription on a ring found on the bird's leg :—

Adresse	4954	P. Skovgaard
Europa	*R	Viborg
		Danmark.

On account of severe locust infestation in the south-western regions of Uganda, tens of thousands of White Storks, evidently on northern passage, are tarrying in the Protectorate very much later than usual.

Normally most of the migrant White Storks have finished passing north by mid-February at the latest. Probably what was part of the normal movement was witnessed on January 28 and 29, 1934, when several thousands, high up,

passed northerly in the middle of the day over the Nile where it leaves the Victoria Nyanza. On March 8, however, in the locust-infested areas of the Ankole District miles of country, literally white with Storks, were traversed.

NOTICES.

The next Meeting of the Club will be held on Wednesday, May 9, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

1. The evening will be devoted to a series of short discussions upon matters of ornithological interest.

2. Dr. P. R. Lowe will exhibit a hybrid between a Black Grouse and a Pheasant.

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXVIII.

The three-hundred-and-seventy-third Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, May 9, 1934.

Chairman : Mr. D. A. Bannerman.

Members present :—Miss C. M. Acland; E. C. Stuart Baker; Miss P. Barclay-Smith; F. J. F. Barrington; Brig.-Gen. R. M. Betham; Major R. E. Cheesman; H. P. O. Cleave; A. Ezra; Miss E. M. Godman; Capt. C. H. B. Grant; Rev. J. R. Hale; Col. A. E. Hamerton; Dr. J. M. Harrison; R. E. Heath; P. A. D. Hollom; Dr. E. Hopkinson; Rev. F. C. R. Jourdain; Miss E. P. Leach; Dr. G. Carmichael Low (*Editor*); Dr. P. R. Lowe; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*); Lt.-Col. H. A. F. Magrath; G. M. Mathews (*Vice-Chairman*); J. G. Mavrogordato; C. Oldham; H. Pease; Miss G. Rhodes; C. B. Rickett; B. B. Rivière; W. L. Sclater; B. W. Tucker; Miss E. L. Turner; J. Vincent; G. A. Wade; H. F. Witherby; C. G. M. de Worms.

Guests :—R. Flower; J. P. R. Hale; Eric Parker; Mrs. B. B. Rivière; A. W. Vincent.

Dr. P. R. Lowe exhibited a hybrid between a Black Grouse and a Pheasant and said :—

My exhibit to-night is an example of hybridization between the Black Grouse and the Pheasant; and although the material is actually new, it is virtually a repetition of an exhibit I made at the Club in the year 1931 (Bull. B. O. C. lii. 1931, pp. 58–60).

But it is just the constant repetition of the self-same characters in any given series of these hybrids that makes this particular exhibit interesting and also adds very considerably to the interest of the three other examples which I have brought across from the Museum. In fact the dominant reason which justifies the exhibition of this new specimen is its very close similarity to the examples we have in the Museum.

This new specimen was sent to us, in the flesh, last February by Mr. Kay Robinson, of the 'Field.' It came from Abbeystead, near Lancaster, Lord Sefton's place. On the other hand, the last one I described came from Long Mountain in Montgomery, and was sent to us in November 1931 by the Rev. H. E. Cooke, although actually presented by Mr. H. G. Harrison.

I will not bore you with a description of the plumage of these two hybrids, for I described the Welsh specimen in the 'Bulletin' for December 1931 (*loc. cit.*); but you can compare them for yourselves and see how like they are. It is enough to say that, although taken in localities so far apart and with an interval in time of three years, they might, except for some rather conspicuous hen pheasant-like feathers on the breast of the new specimen, almost have been taken out of the same nest and have been brothers.

One of the other specimens which I have brought and which is also strikingly similar to the two just referred to has the distinction of having been exhibited by Yarrell at a meeting of the Zoological Society in 1837—the year Queen Victoria came to the throne. It only wants, therefore, three years to make it, as a museum skin, a centenarian.

Yarrell said at this meeting that this bird more closely resembled the hybrid discussed by Gilbert White than any of the previous specimens he had examined.

The last specimen to note is perhaps even more historical. It came to the British Museum from the Royal College of Surgeons, who acquired it from the Lever Museum. It is, unfortunately, undated, and leaves us in ignorance of the locality whence it was taken.

Lever was born in 1729 and died in 1788, so this skin must be at the very least 146 years old; yet the coloration, colour-pattern, and the general "make-up" of characters is strikingly identical with the three other specimens exhibited.

These hybrids between Black Game and Pheasants are not rare. The Rev. F. C. R. Jourdain has collected some 60 or 70 records *; but their interest does not lie in their frequency or infrequency of occurrence, but, as I have said, in the wonderful way in which, when examples do turn up, their peculiar characters repeat themselves year after year.

As regards the sex of these hybrids, a word may be said :— Two of the specimens exhibited to-night we *know* to have been males, because we received them in the flesh. The one which came from the Lever Museum has been sexed a male probably because it looked like one. The other is unsexed. Probably all four were males, but we do not know the sexes of their progenitors. I have never seen an example of a reciprocal cross, and we have not got one in the Museum.

To express an opinion as to whether the parents were male Black Grouse and female Pheasant, or the other way round, is really guessing. My own inclination is to regard these hybrids as arising from the union of a Cock Pheasant and a Grey Hen. My reasons are that, although the plumage of all four specimens is a mixture of black game and pheasant characters, it is the pheasant characters which seem dominant; and this dominance of the pheasant characters is found in the skeleton which I had made from the body of the hybrid I am exhibiting to-night. It is especially noticeable in the pelvis and sternum.

Millais ('Game Birds and Shooting Sketches,' 1892, p. 40) says :—"It is usually the case that in most of the crosses

* 'Zoologist,' x. 1906, pp. 321–330, *t. c.* p. 433, and 'British Birds,' vi. 1912, p. 146; *vide* also Bull. B.O.C. lii. 1931, p. 60.

with which the Black Cock has anything to do the young take very strongly after him and are generally of a very plain and black appearance without possessing that noble bird's individual beauties." It may therefore be that in most of the crosses the Black Cock element is dominant, but not in the case with the Pheasant.

Millais (*loc. cit.*) figures a hybrid between a Black Grouse and a Common Grouse, and the difference between this cross and the one I have been exhibiting is not so striking as one would have expected. When, therefore, it is said that reciprocal crosses between the Black Grouse and Pheasant are well-known, caution is necessary in accepting the statement, because they may be crosses between Black Grouse and Common Grouse. If we study the Rev. F. C. R. Jourdain's lists published in the 'Zoologist' (1906) (*loc. cit.*) and elsewhere, the impression gained seems to be that most of the hybrids are similar to the ones I exhibit to-night, and that very many, or the majority, are males.

In this connection it may be pointed out that the hybrid figured on plate iv. by Mr. Jourdain in the 'Zoologist' (1906) exhibits signs of immaturity in its white throat, cheeks, and sides of neck. He has called it a hen, but on what grounds I do not know. In the male hybrid exhibited by me from Montgomery steely blue feathers are pouring through and displacing the white juvenile feathers over an area exactly similar to that figured by Mr. Jourdain.

Hybrids between *Phasianus* and *Lyrurus* in British Museum.

(1) Adult ♂. Brit. Mus. Reg. no. 1934.2.9.1. Abbeystead, Lancaster (Lord Sefton's Estate), Feb. 1934. Obtained through the 'Field' Newspaper.

(2) Adult ♂. Brit. Mus. Reg. no. 1931.11.12.1. Long Mountain, Montgomery, Nov. 1931. Presented by Mr. H. G. Harrison. Described Bull. B. O. C. lii. Dec. 1931, pp. 58–60.

(3) Adult ♂. Undated. Brit. Mus. Reg. no. 1909.3.23.2. Lever Mus., ex Royal College of Surgeons.

(4) Unsexed. Undated. Brit. Mus. Reg. no. 1934.5.10.1. Alnwick Castle, Duke of Northumberland. *Vide* Yarrell, P. Z. S. 1837, p. 135; Cat. Birds Brit. Mus. xxii. 1893, p. 58. Figured Ill. Lond. News, Aug. 18, 1906.

Mr. Jack Vincent, who had just returned to England on the completion of Admiral Lynes's expedition to the Southern Congo Basin, mentioned that he did not propose to say anything in connection with the trip, as it was to be hoped that Admiral Lynes would himself give the Club, at a later date, a full account of their wanderings.

It is my intention this evening, he said, to allude to a subject of interest to a meeting of ornithologists who are better acquainted with European than with Central African birds, namely, the breeding of the Roseate Tern (*Sterna dougallii*) in South Africa :—When in Cape Town in June 1930 my brother and I decided to collect some sea-birds and eggs from the islands off the Cape Coast, and one locality selected was Dyers Island, a very tiny piece of land lying a few miles off the Caledon coast near the southernmost point of Africa, Cape Agulhas. Permission having been obtained, and after a long journey by car, the nearest part of the mainland at Frikkie's Bay, was reached at dawn on June 24, and our smoke signal was answered by a flash from the lighthouse; the islanders soon put off in a small sailing boat, which encountered rough seas before reaching us, and they duly reported that the weather obviated our being able to visit, or their being able to put back to, the island that day.

Having ample time on our hands, we were undeterred, and proceeded to the nearby Gans Bay, a small Cornish-like hamlet apparently dependent upon the Snoek-fishing industry, where we had a day's collecting and spent the night. The following morning, June 25, was fine and clear, with a " flat " sea, and a short spell of rowing and sailing brought us to the small rocky island, where we proceeded to investigate the bird population.

I do not intend to describe in detail the many wonderful sights which a short walk revealed, but a brief list of some of the birds which I can remember having seen may be of some interest. Three species of Cormorants or Duikers were common —the Reed Cormorant (*Phalacrocorax a. africanus*), the Cape Cormorant (*P. capensis*), and the White-breasted Cormorant (*P. carbo lucidus*), the two latter nesting on the summits of

small pinnacles of rock with the colonies quite separate one from the other.

A short distance away from the Cormorants was a large breeding colony of Swift-Terns (*Sterna b. bergii*), whose young were waddling about in a confused mass surrounded by screaming adults, and that any parent bird could discover its own progeny seemed an impossibility. In among this colony of Swift-Terns were numbers of nests of Hartlaub's Gull (*Larus hartlaubii*), the only species which was not communal in its breeding, but which was laying at random in among all the other birds. The most ubiquitous inhabitants were the Jackass Penguins (*Spheniscus demersus*), which were, however, by no means as numerous as on Dassen Island in Table Bay; nevertheless their donkey-like braying was one of the loudest noises in the indescribable din which persisted during our stay An interesting point in connection with these Penguins was that on Dassen Island the large majority of birds laid in short burrows in the sand, apparently as a protection against those arch egg fiends the Southern Black-backed Gulls (*L. dominicanus*), whereas on Dyers Island, where these large Gulls are uncommon, almost every Penguin had its eggs on the surface.

To our surprise and delight we found at one end of the island a quieter stretch of shingle, where two pairs of Roseate Terns became greatly agitated on our approach. After a short search we discovered the nests, and whilst my brother collected two clutches of eggs I secured two parent birds, which are now in the National Collection. There have been many conflicting reports as to the occurrence and breeding of the Roseate Tern on the Cape coast, and it is of interest that all doubts should be set at rest by this definitely authentic record. I have not examined the skins in very great detail, but a short comparison with other examples in the British Museum this morning, when it was suggested I should speak upon this subject to-night, lead me to the conclusion that the birds compare very closely with nominate *Sterna d. dougallii* and are larger than the race described from the Seychelles.

The nesting-site was in a stretch of growth which had all the appearance of groundsel, apparently the only plant on the

island, which lined the shore just above the narrow sandy beach. No attempt was made at building a nest, the eggs being laid on a small patch of bare earth. Of the clutches taken one was fresh and the other fairly well incubated.

In conclusion, I would mention another record of interest on the same day, for just as we were leaving the island I secured two Turnstones (*Arenaria i. interpres*) in breeding plumage, which are also now in the National Collection in the British Museum.

Mr. Vincent then exhibited the two birds collected on Dyers Island, and in introducing his brother, Mr. A. W. Vincent, also an enthusiastic ornithologist on leave in England from his work in the Belgian Congo, mentioned that it was to be regretted that the two clutches of eggs could not be shown to the meeting, as they were in his brother's collection in South Africa.

Brigadier-General Betham made a few remarks on his own attempts to reach Dyers Island, all of which were unsuccessful owing to the heavy seas prevailing.

The Rev. F. C. R. Jourdain called attention to the disappearance of *Zostera marina* from the south coast of England, and its effect on the bird-life of the British coasts. He had been informed that this had also been noted on the North American coast and in East Anglia, the *Zostera* beds turning brown and breaking up, finally disappearing altogether. The great swannery at Abbotsbury seems to have been completely broken up, apparently from this cause, and great numbers of Swans have frequented Christchurch Harbour, Poole Harbour, and Southampton Water of late, which have made no attempt to breed except in a few cases. As the *Zostera* is the main article of diet in some of the Geese and Ducks (especially the Brent Geese and the Wigeon), and is also eaten more or less by many other species, its disappearance, if permanent, is likely to have far-reaching effects on the bird-life of our estuaries and harbours. The speaker asked for more information as to the cause of the disappearance of the *Zostera* beds, and also invited observations on changes in the distribution of the birds dependent on it for food.

Dr. G. Carmichael Low said that the disappearance of *Zostera marina* had also been noted on the East Coast of England. When at Aldeburgh last Easter (March 30 to April 2, 1934) the watcher there informed him that the banks in the estuary had been greatly depleted of their grass, and as a result considerably fewer Wigeon had visited the locality than usual. Many of the banks were brown and showed no sign of green at all. Information received later from the Botanical Department of the British Museum (Natural History) elicited the important fact that the *Zostera* was dying out in certain localities in the Southern Coast of England and Western Europe, but that there was no evidence of any diminution in its abundance in Scotland, areas such as the Tay, below Tayport, and the Montrose Basin still being well supplied. Reports, however, also show that in North America there has been a diminution. The death of the plant is supposed to be due to the action of a bacterium, but as far as he (Dr. Low) knew no experiments had yet been carried out to prove or disprove this. Another theory was that the disappearance was a cyclical one, corresponding in a way to the waxing and waning of different zoological species. At the moment nothing was definitely known as to the cause of the disappearance.

Zostera marina, also known as Grass-wrack, Sea-grass, or Wigeon-grass, belongs to the order Helobiæ, family Potamogetonaceæ, and is common on all north temperate coasts, growing on the mud-banks of estuaries, where the sea-water is diluted with fresh water coming down the rivers and where the ground is uncovered by each tide. Muddy ground, such as is found on the shores and banks of estuaries, would seem to be essential to its growth, and here it gets the organic matter upon which it feeds. *Ruppia maritima* and *Zanichellia palustris*, members of the same family, grow in brackish water also.

Wigeon and Brent Geese are specially fond of the *Zostera*, and its disappearance will undoubtedly have an effect upon the numbers of these species visiting our estuaries.

Mr. C. Oldham also spoke. He corroborated the statement that the disappearance of the grass was due to a bacterium,

quoting Dr. Butcher as his authority. He believed that the latter was going to carry out some experimental work on the subject in the immediate future.

Mr. David Bannerman sent the following notes on the types of *Tricophorus flavigula* Cabanis, *Xenocichla pallidigula* Sharpe, *Phyllastrephus flavicollis adamauæ* Reichenow, and *Xenocichla flavicollis simplicicolor* Grote :—

I have recently had occasion to re-examine the races of the Yellow- and White-throated Bulbuls which are placed by Mr. W. L. Sclater in the 'Systema Avium Æthiopicarum' in the genus *Atimastillas* Oberholser. Following recent authors he groups all the races, both those with a white and those with a yellow throat, under the specific name *flavicollis* Swainson, a course with which I agree. In the 'Systema' he lists six subspecies, but he unfortunately overlooked a paper written by Mr. G. L. Bates and myself (Ibis, 1926, p. 796), where we point out that there has been confusion between *Tricophorus flavigula* Cabanis, Orn. Centralb. 1880, p. 174 : Angola, and *Xenocichla pallidigula* Sharpe, Bull. B. O. C. vii. 1897, p. 7 : Entebbe, resulting in the specimens in the National Collection with a white throat having been wrongly determined as *flavigula*, whereas that name should be used for the bird with a sulphur-yellow throat which Sharpe inadvertently re-named *pallidigula*. Neumann corrected this mistake in the 'Ornithologische Monatsber.' xxii. 1914, p. 9, where he mentions that *pallidigula* Sharpe must become a synonym of *flavigula* Cabanis, and in that paper he names the birds with a white throat *Xenocichla flavicollis soror*. All this we pointed out in the Ibis, 1926, pp. 796–798, where we state "the true *flavigula*, of which we consider *pallidigula* a synonym, has a sulphur throat, while *soror* has a whitish throat with a very pale sulphur wash." There is, indeed, hardly a trace of sulphur wash, but it may *just* be discerned. In the same contribution we note that one of us (Bates) compared Neumann's type of *soror* (which was then in the Rothschild collection at Tring, but is now in New York) with specimens of this whitish throated bird in the British Museum from Cameroon, and found that they agreed exactly. At the

time we were not able to compare the types of *flavigula* Cabanis, *adamauæ* Reichenow, and *simplicicolor* Grote with our material in the British Museum. Now, thanks to the kindness of Herr Gadow, the Secretary of the Berlin Museum (in the absence of Dr. Stresemann abroad), I have been able to examine all these types at the British Museum, together with *pallidigula* Sharpe in our own collection, and would take this opportunity of expressing my opinion upon them: I follow Bates in placing all these Bulbuls in the genus *Pyrrhurus*, as I consider that the genus *Atimastillas* was separated on very slight grounds.

Pyrrhurus flavicollis flavigula (Cabanis). The Sulphur-throated Leaf-love.

The type is a dismounted bird which has lost many feathers from the hind crown and all from the back of the neck. It measures: bill 19, wing 113, tail 105, tarsus 26 mm.; the feathers of the mantle are distinctly rufous, which is apparently caused by wear or staining, as the same colour is noticeable in other worn skins in the British Museum, *i. e.*, a skin from Nyasaland, Brit. Mus. Reg. no. 1899.3.1.105. It certainly cannot be put down to normal colouring. In the type the throat is very pale sulphur-yellow and has obviously faded. This specimen was collected by Schütt and is labelled "Angola."

Pyrrhurus flavicollis flavigula differs from *P. flavicollis flavicollis* in having the throat pale sulphur-yellow instead of bright yellow, the breast and underparts much paler, the middle of the belly becoming creamy white and the breast-feathers with greyish middles and white shafts. The upper parts, particularly the crown, more olive and less brown. The type (which I have examined, sex not determined) measures: bill 19, wing 113, tail 105, tarsus 26 mm.

Synonymous with *P. flavicollis flavigula* is *Xenocichla pallidigula* Sharpe, described from Entebbe. Both types are before me as I write.

Range.—Angola (I have not seen any other Angolan skins except the type), Belgian Congo (Kambove, Lufupa River), N. Rhodesia, Uganda, Tanganyika Territory (Kasula, Kome, Mwanja).

Pyrrhurus flavicollis soror (Neumann). The White-throated Leaf-love.

The type from Kamadekke, Ogowe River, Gabon, which is now in the Rothschild collection in New York, was examined in 1926, and is a white-throated bird which resembles the series in the British Museum from Cameroon etc., specimens of which were compared with it by G. L. Bates.

Range.—Gabon (Ogowe River), British and French Cameroons (Kumbo (Banso Mts.), Manenguba Mts., Tibati, Bitye), Ubangi River (near Luma Island), Kwoango, Kibali River, Uele River (Poko), Bahr el Ghazal (Meridi and Tembura).

Note.—I have not seen the type nor any specimens of *Pyrrhurus flavicollis shelleyi* (Neumann), described from Mwanza, S. Victoria Nyanza, ranging west to Lake Kivu.

Pyrrhurus flavicollis adamauæ Reichenow. The Adamawan Yellow-throated Leaf-love.

The type was described from the Genderu Mts. and collected by Riggenbach. It measures: bill 19, wing 114, tail 106, tarsus 26 mm. It appears rather greyer below than typical examples, owing to the grey tips to some of the breast-feathers not being abraded; also the margins of the outer webs of the primaries are a shade greener. It has a bright yellow throat similar to *P. flavicollis flavicollis*. The type of *P. f. adamauæ* has been carefully compared with examples of *Pyrrhurus flavicollis flavicollis* from Gambia Sierra Leone, the Gold Coast, and Northern Nigeria, and it is, as Reichenow declares in his original description, distinctly greyer on the underside than examples collected between Gambia and the Gold Coast in the British Museum Collection. It is most nearly approached in the grey underside by a specimen from near Dejigazan, Niger Province, N. Nigeria, which, if we accept *adamauæ* as valid, must be considered to belong to the same race. All things considered I accept *adamauæ* as a distinct subspecies, although I should have thought twice before separating it myself, and consider it a poor race.

Range.—Known only from the Genderu Mts. (Western Cameroons), and closely matched by a specimen from the Niger Province of Nigeria.

Pyrrhurus flavicollis simplicicolor Grote. The Bosum Leaf-love.

The type of this race (a♀) was collected by Tessmann at Bosum in Eastern Cameroon in a locality which is outside the limits of the range of *soror* or *flavigula*. It resembles *soror* in having a white throat, but the whole of the colouring of the upper parts is brown rather than olive, and in tone resembles the central tail-feathers of *Pyrrhurus flavicollis flavicollis*. It is also rather browner below than examples of either *soror* or *flavigula*. The bill is broken, but the other measurements are: wing 100, tail 88, tarsus about 26 mm. It is, in my opinion, a perfectly good race. It is not represented in the British Museum.

Range.—Known only from the Bosum region of Eastern French Cameroon.

Messrs. T. H. Harrisson and C. H. Hartley sent the following descriptions of new races from mountain areas in Borneo.

The Oxford University Sarawak (Borneo) Expedition, 1932, worked mainly in the central highlands of the Mt. Dulit district, Sarawak. A full account of the expedition will be found in the 'Geographical Journal,' lxxxii. no. 5, Nov. 1933, pp. 385–410, and map. One of us (T. H. H.) has already given a general account of the ornithological work, and described the mountain habitats and zonation (Bull. B. O. C. liii. 1933, pp. 107–115).

Thanks chiefly to the labours of the two Kuching Museum collectors attached to the expedition, we brought back a collection of about a thousand skins for the British Museum; in the following paper we describe ten new races. A full account of our collection, as well as papers dealing with the ecology and habits of the bird population, will appear in due course, and further new forms may be described. Borneo mountains have flora and fauna distinct from the lowlands, the study of which was one of the first objects of all the scientists on the expedition. A large number of exclusively mountain birds have already been described from Borneo, mainly from Mt. Kinabalu (13,680 ft.) and from Mt. Dulit (4600 ft.); and

most of the forms described below are mountain. All these have special significance with reference to our study of the origin, evolution, and exact distribution of mountain life. Separate races have already been distinguished for a few species in the different mountain masses of Borneo; and we have been able to do this in a number of other cases, finding distinct races on peaks about 100 miles apart. Further collections from the mountains of Dutch Borneo and such peaks as Mulu, Kalulong, and Tiban, in Sarawak, should produce further examples. Borneo mountains are thus doubly noteworthy, since they have birds distinct not only above and below the 3000 ft. level, but also on different peaks. Eight of our races are distinct between Kinabalu in North Borneo and Dulit in Sarawak. In a number of cases we suspect a third race in the Poi–Penrissen group in West Sarawak (Kuching district), but the material from these mountains is usually inadequate, and we have named only one. Two races described here are from the lowlands or the whole of Borneo. Chasen and Kloss (Bull. Raffles Mus. 1930, no. 4) have separated a number of species into North Borneo and Sarawak races; the Kinabalu–Dulit distinction approximates to this lowland division.

In the following notes the main mountain groups referred to are: North Borneo—Kinabalu and Marabok; Central North Borneo—Klingkang and Murud; Central Borneo—Dulit and Kalulong; West Sarawak—Poi, Penrissen, Matang, and Sidong. We have described new races by comparison with previously named Bornean races, but in all cases other races of the same species, including the typical form, have also been compared. Only the wing-measurements are given, except where other measurements are significant.

We have been fortunate in having had not only the benefit of our own and the British Museum collections, but also the facilities for studying the collections at the Kuching Museum, Sarawak, and also at the Raffles Museum, Singapore, where a fresh collection from Kinabalu was especially valuable. We wish to express our gratitude to E. Banks and F. N. Chasen for providing us with these facilities, to N. B. Kinnear and Dr. Finn Salomonsen for critical advice, and to Zita Baker for clerical help.

Pyrotrogon kasumba usa, subsp. nov.

This Trogon is uncommon, but generally distributed in the Malay States, rather scarce in Sumatra and Borneo; it is not mentioned in Robinson and Kloss's Java list ('Treubia,' v. 1924, pp. 1–3). Two obtained by W. J. F. Williamson at Baguara, Siam, July 1916, were the first recorded from Siam (Journ. N. H. S. Siam, v. 1923, p. 146). It does not occur elsewhere. In Malaya it is mostly a lowland species, but in Sarawak it occurs mainly in virgin forest up to 2000 ft. Previous writers considered the species to be uniform throughout its range, but an examination of fifty skins leads us to think differently. Wing ranges of thirty-five adults measured are :—

Males :

Malaya ..... 142–148 mm.; av. 144·6 mm.
Borneo ..... 131–141 mm.; av. 133·5 mm.

Females :

Malaya ..... 142–149 mm.; av. 145·6 mm.
Borneo ..... 132–142 mm.; av. 138·0 mm.

Chasen and Kloss (Bull. Raffles Mus. no. 4, 1930, p. 28) in North Borneo obtained three males, wing 134, 134, 139 mm., and four females, wing 132, 136, 140, 140 mm., which fit the above figures.

There is thus a clear racial distinction on wing-measurement. The type of *P. k. kasumba* came from Sumatra—*Trogon kasumba* Raffles, (Trans. Linnean Soc. xiii. 1822, pp. 282–283); the only available Sumatra measurements are for two males, wing 134 and 144 mm., which suggests that Malayan birds are typical *kasumba*.

Description.—Smaller than *P. k. kasumba* of Sumatra and Malaya. There is no constant colour distinction in the male, though in the female there is a tendency for Sarawak birds to have greyer throats.

Measurements as above.

Distribution.—Borneo; not common. Specimens from Lamag in north-east Borneo; Bettotan, Samawang River, and Kinabalu foot-hills, in north-west Borneo; Kuching

(numbers), Baram, Mt. Kalulong (four from 2000 ft.), and Mt. Dulit, in Sarawak.

Type.—In the British Museum. Male, Mt. Kalulong, Sarawak, 2000 ft., April 5, 1893, taken by a native collector acting for Charles Hose. Brit. Mus. Reg. no. 1894.2.2.15.

Remarks.—Named after our most reliable native and friend, Uyau Usa, a Kenya from Long Atun, on the Tinjar River, Sarawak. We promised to name a bird after him, and Trogon shooting was one of his specialities.

Mesobucco duvaucelii cyaneus, subsp. nov.

There is considerable confusion, as discussed by Robinson and Kloss (Journ. N. H. S. Siam, v. 1922, p. 166), in races of *Mesobucco*. As well as lowland forms a distinct mountain form, *M. d. eximius*, was named from Dulit on specimens collected by Hose (Ibis, 1892, p. 324). We have examined fifteen birds from Borneo mountains in addition to lowland birds, and find, as in many other cases, that Kinabalu possess a distinct form.

Description.—Frontal band blue, not black or blue-back as in *M. d. eximius*.

Measurements.—Two males, wing 76, 82 mm. One immature, unsexed, 80 mm.

Distribution.—Mt. Kinabalu, North Borneo.

Type.—In the British Museum. Male, Mt. Kinabalu, North Borneo, October 1895, wing 76 mm.; coll. A. H. Everett. Brit. Mus. Reg. no. 1896.6.10.62. Topotypes at Singapore.

Remarks.—Any form of *Mesobucco*, mountain or lowland, is scarce in Borneo. Parrot described *M. d. borneonensis* from the lowlands of North Borneo*, but Chasen and Kloss (Bull. Raffles Mus. 1930, no. 4, p. 36) consider Malay (*M. d. robinsoni* of Stuart Baker) and Bornean birds are not separable from *M. d. duvaucelii* Lesson of Sumatra. All these have black crowns. The type of the Dulit *M. d. eximius*, which is perfectly distinct from all lowland forms, is described by Sharpe as having "a broad frontal band of black slightly

* Abhandl. Math. Phys. Ak. Wissensch. München, xxiv. 1907, p. 171.

washed with blue." The bird described was a male. Seven male and one female topotypes of *M. d. eximius* all have the frontal band black or blackish; the type is the least black of the specimens examined. Specimens from Penrissen (two males) and Prang (one female) resemble birds from Dulit. The Kinabalu birds all have the frontal band blue or blue-green, with no trace of black.

There is an overlap between the distribution of mountain and lowland forms. In the British Museum there is an adult female *M. d. eximius* labelled "Tinjar River, 26. vii. 19. Coll. H. C. Robinson;" and one of the Penrissen birds at Kuching was taken by Dr. E. Mjöberg at only 2000 ft. On the other hand, there are in the British Museum typical lowland *M. d. duvaucelii* from Mt. Salikan (2000 ft.), Dulit (one male, 3000 ft.), and Kalulong (four males). The relative position and distribution of these forms still remains rather uncertain.

Malacocincla canicapillus longstaffi, subsp. nov.

We have examined forty-four Borneo skins, including fresh series from Dulit and Kinabalu; we have placed a new Dulit race as a form, provisionally, of *M. c. canicapillus*.

Description.—As compared with *M. c. canicapillus* from Kinabalu it is larger, and differs in the possession of a well-defined rufous band across the chest (slight or absent in *canicapillus*) and in its more rufous colouring generally, especially on the flanks and abdomen. Some birds have the underparts entirely rufous except for the chin and a small white belly-patch.

Measurements.—Wing: Dulit, twelve males, 64–72 mm. (seven of 68 or over); two females, 70, 72 mm. Kalulong, two males, 68, 71 mm.; one female, 65 mm. Measurements of *canicapillus* from Kinabalu: three males, 64–68 mm.; three females, 65–69 mm.

Distribution.—The mountains of Central Borneo. One of the commonest birds on Dulit from 3000 ft. to the summit. Also on Kalulong.

Type.—In the British Museum. Male, Mt. Dulit, 3600 ft., September 18, 1932. Bill blackish horn, rather paler at edges

and at base of mandible; feet brownish flesh; iris light red-brown. Wing 70 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.21.6.

Remarks.—Named after Dr. T. G. Longstaff, Honorary Secretary of the Royal Geographical Society, who has done much to help both of us and also to help the O. U. Exploration Club.

M. canicapillus was named from Kinabalu by Sharpe (Ibis, 1887, p. 450). The lowland allies are *M. rufiventris* Salvadori from Sarawak and *M. harterti* Chasen and Kloss (J. f. Ornith. 1929, p. 116) from British North Borneo, which are both forms of *M. sepiara*, as discussed by Chasen and Kloss (Bull. Raffles Mus. no. 4, 1930, p. 13).

The lowland *M. s. rufiventris* overlaps the mountain form on Dulit, both occurring in the same habitat in the Koyan Valley on the south side of the Dulit Range. Thus the form described is not a mountain form of *M. sepiara*, but must be considered to be directly allied to *M. canicapillus* of North Borneo mountains.

We have associated Kalulong birds with those from Dulit, 50 miles away, but, if anything, the former are even darker on the back and more darkly rufous below. Fourteen specimens from Mts. Poi and Penrissen have the crown paler than Dulit or Kinabalu birds.

Measurements.—Penrissen, six males, 69–74 mm.; three females, 67–73 mm.; two unsexed, 68, 71 mm. Poi, two males, 73, 77 mm.; one female, 71 mm.

These have not been compared side by side with a good series from other mountains, and their position remains uncertain.

Stachyris larvata vermiculata, subsp. nov.

We have examined altogether sixty-five skins, including fresh series from Kinabalu and Dulit. As in other cases here considered, each mountain has a distinct race, and there is reason to suspect a third from Poi and Penrissen.

Description.—Differs from *S. l. borneensis* in the following

characteristics :—Underparts darker, with no orange tinge in the rufous colouring. Chin darker. General shade of back, tail, and primaries noticeably darker and less rufous (*borneensis* is much paler). Crown darker, with less grey and white marking. All Dulit skins—nine in the British Museum, sixteen of ours, etc.—have fine black vermiculations on the feathers of the back, giving a thin but noticeable barring effect, the vermiculations in Kinabalu birds being faint, and the whole effect much paler. The last distinction is the strongest, and establishes a clear race.

Measurements.—Wing : twelve males, 60–64 mm. ; fourteen females, 59–63 mm. Wing of *S. l. borneensis* from Kinabalu : fifteen males, 58–65 mm. ; seven females, 58–62 mm.

Distribution.—Mt. Dulit, Sarawak, above 3600 ft., mainly in the moss-forest, where it is common.

Type.—In the British Museum, male, Mt. Dulit, Sarawak, August 29, 1932. Testes medium size; bill blackish; feet greyish green; iris light buff. Wing 64 mm. Coll. T. H. Harrisson and C. H. Hartley O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.5. Topotypes in the British Museum (25) and Kuching.

Remarks.—Birds from West Sarawak mountains average a good deal longer in the wing. Measurements : Poi, one male, 68 mm. ; one female, 62 mm. Penrissen, three males, 60–66 mm., two females, 63, 63 mm. ; three unsexed, 59–65 mm. (Kuching and British Museum collections). These are also paler than birds from Dulit or Kinabalu, extremes being pure sandy below, the crown rather paler, and the back showing a general greenish wash with only a trace of rufous colouring.

They are thus near *borneensis* and *vermiculata*, but paler and larger. They probably constitute a third race; but we have been unable to bring all the specimens together for comparison, and hope that someone will do so.

Rhinocichla mitrata damnata, subsp. nov.

We have examined seventy Borneo skins, including our own fresh series from Dulit and Chasen's 1931 Kinabalu

material. The Dulit race is clearly distinct, but birds from other mountains are confusing; there may be a third race.

Description.—Compared with *R. m. treacheri* of North Borneo it is darker on the back and, on an average, on the tail, the breast being less greenish and lacking any prominent shaft-streaks and pale feather centres. *R. m. treacheri* can readily be distinguished by its much greener chest and well-marked streaking, which in some *damnata* is entirely absent. On an average *treacheri* is larger.

Malayan *R. m. major* Robinson and Kloss are considerably greener, with well-marked black chins and much paler backs, wing 100–119 mm. Typical *R. mitrata* P. L. S. Müller, from Sumatra, are grey below; wing 94–106 mm.

Measurements.—Wing: Dulit, ten males (100), 104, 107, 107, 108, 109, 110, 111, 112, 116 mm.; nine females, 102, 104, 104, 105, 105, 105, 106, 107, 108 mm. Kinabalu *treacheri* males, 101–109 mm.; females, 91–104 mm.

Distribution.—Mountains of Central Borneo. Very common from 3600 ft. upwards on Mt. Dulit, Sarawak; also specimens from the Kalabit country and Mt. Derian.

Type.—In the British Museum. Male, Mt. Dulit, Sarawak, 4000 ft., August 25, 1932. Testes small; soft parts similar to *treacheri*, wing 112 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.2. Topotypes in the British Museum, Kuching, and Singapore.

Remarks.—This is by far the most numerous bird in the moss-forest area on Dulit, above 4000 ft. We had to stop natives from shooting it, as we had neither the time nor the ammunition to spare. *Rhinocichla* was a curse; therefore *damnata*.

R. m. treacheri was named from two adults, one from "N.W. Borneo" and one from Kinabalu (Sharpe, P. Z. S. 1879, p. 245). British Museum specimens from Lawas, North-East Borneo, and Mt. Marabok, Brunei, are very pale in general colouring, with the upper breast noticeably green and pale, and with only a trace of white on the crown; wing 102–104 mm. They are thus intermediate between North

and Central Borneo forms, but may represent a third distinct race. A bird from Tampussik River, Dutch Borneo (coll. W. Prettyman, in the British Museum), is very pale and less streaked than any other seen, with a very small red chin-patch, distinctly tinged with black; wing 110 mm. This is close to the Sumatran *mitrata*, though the chin is not black enough.

We have associated Kalabit and Derian birds with our new race. A female in the Kuching Museum from Main, Kalabit Country, has a wing of 116 mm., the largest we have seen. The species is not known from the mountains of West Sarawak, Poi, Penrissen, etc. Further material from all parts of Borneo should prove interesting.

Dendrocitta sinensis tuckeri, subsp. nov.

We have examined thirty-four skins. Birds in abraded plumage have not been considered, and comparisons are mainly on fresh skins and skins taken in the same month.

Description.—Compared with *D. s. cinerascens* of North Borneo (see below) the crown is a purer grey, with its posterior termination sharply defined, not merging into the back; a marked black line as frontal band is usually present. *Cinerascens* appears to have a greater maximum tail-length.

Measurements.—Wing: Dulit, ten males, 144–153 mm.; four females, 137–149 mm. (*cf.* Kinabalu *cinerascens*, six males, 137–150 mm.; five females, 144–150 mm.). Dulit birds have a tail-length average of under 250 mm., max. 273 mm.; two out of the three Kinabalu skins in the British Museum have tails of over 280 mm.

Distribution.—Mt. Dulit, Sarawak; no doubt also on adjacent mountains. Only occurs in moss-forest above 3600 ft.

Type.—In the British Museum. Male, Mt. Dulit, Sarawak, 4400 ft., moss-forest, October 10, 1932. Testes fair sized and blackish; iris dark chestnut; bill and feet black; wing 153 mm.; tail 273 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.1.

Remarks.—Named after B. W. Tucker, Curator of the Oxford University Museum. The type of *D. cinerascens* Sharpe (Ibis, 1897, p. 250, pl. viii.) came from the Lawas River, North Borneo (coll. Treacher). It proved to be an unsexed immature bird, and the original plate is inaccurate (corrected in 'The Ibis,' 1889, p. 82). The type is now in the University Museum, Oxford, and agrees with immature birds from Kinabalu, thus limiting the northern extension of *tuckeri*.

A bird from Mt. Marabok, unsexed, wing 138 mm. (coll. Waderstadt), is close to Dulit birds. Both Borneo races are near to *D. occipitalis* P. L. S. Müller of Sumatra.

Buchanga leucophæa penrissenensis, subsp. nov.

Buchanga occurs only at the highest mountain levels. We separate two new forms of this Drongo, making three races for the three best collected mountains of Borneo. We have avoided old and abraded skins.

Description.—Larger than *B. l. stigmatops* of Kinabalu and *B. l. dulitensis* (see below). Perhaps slightly paler than Kinabalu birds. Twelve of this new race compared with twenty-seven Kinabalu skins of all ages.

Measurements.—Wing: Penrissen, one male, 142 mm.; three females, 132, 136, 136 mm. Poi, five males, 132, 132, 135, 137, 137 mm.; three females, 132, 133, 136 mm. Thirty-seven specimens from other parts of Borneo have a wing range of 122–134 mm., but only two of these exceed 132 mm. (133, 134 mm.).

Distribution.—Mountains of West Sarawak.

Type.—In the Kuching Museum, Sarawak. Male, Mt. Penrissen, Sarawak, 3500 ft.; wing 142 mm. Coll. Dr. E. Mjöberg. Topotypes: three at Kuching (also five from Poi) and two at Singapore. No specimens in the British Museum.

Remarks.—The type of *B. stigmatops* (in the British Museum) came from Kinabalu, being collected by F. W. Burridge and described by Sharpe (P. Z. S. 1879, p. 27). This had a wing of 134 mm., but twenty other Kinabalu birds have wing: 122, 123, 123, 123, 124, 125, 125, 126, 127, 127, 127, 128, 130,

130, 130, 130, 131, 131, 131, 133 mm. A male (?) from Mt. Derian in the Kuching Museum has wing : c. 137 mm.

Buchanga leucophæa dulitensis, subsp. nov.

Description.—Darker than *B. l. stigmatops*, which has the underparts paler and whiter, the chin noticeably pale, and the tail blue with a blackish tip. The new race has a much darker bluish tinge below, with the chin the same colour as the breast, and the tail (in fully developed adults) blackish all over. Size as *stigmatops*.

Measurements.—Wing : thirteen males, 126–132 mm.

Distribution.—Mountains of Central Borneo. Mt. Dulit above 4000 ft., moss-forest zone, scarce. Also in the Temabo and Marabok Ranges.

Type.—In the British Museum. Male, Mt. Dulit, Sarawak, 4500 ft., moss-forest, August 22, 1932. Testes small; bill and feet black; iris orange-red. Wing 128 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.4.

Æthopyga mystacalis perretti, subsp. nov.

Fresh material from Dulit has put us in a position to compare series from Borneo with typical *A. temmincki* P. L. S. Müller of Sumatra, with which Bornean and Malayan birds have been thought identical. Thirty-one Borneo and seven Sumatra skins examined.

Description.—Differs from the Sumatran *temmincki* as follows :—

Male : breast darker and more blood-red; malar streak stronger and broader, with strong blue-purple colouring; blue-purple patches on the crown and rump brighter and more extensive; abdomen dark grey; mantle and tail darker red.

Female : breast darker green; abdomen more yellow; lower back dark green; green tinge on crown.

In both sexes the mandible, as compared with *temmincki*, appears to be darker below.

Measurements.—Wing : thirteen males, 51–57 mm.; three

females, 48–49 mm. Tail: fourteen males, 43–55 mm.; nine females, 26–29 mm. Sumatra: Tails: four males, 56–64 mm.; three females, 28–33 mm. Bill-length from the gape in *perretti* regularly averages 17 mm., as compared with 18 mm. in *temmincki*.

Distribution.—Mountains of Borneo, usually above 4000 ft., but occasionally down to 1000 ft. or less.

Type.—In the British Museum. Male, Mt. Dulit, Sarawak, 4000 ft., moss-forest, August 24, 1932. Testes medium; bill blackish; mandible brown below; feet dull brown, with soles yellowish; iris dull brown. Wing 54 mm., tail 52 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.7.

Remarks.—Named after W. H. Perrett, of the Bird Room, British Museum, who has always been of help to us, especially with our Borneo collections.

Though *perretti* is a characteristic bird of the moss-forest zone on Dulit, we collected two specimens in high virgin forest at the foot of the mountain, while in the Kuching Museum there are four specimens from Mt. Matang, 2800 ft. The lowland *A. siparaja* is mainly a bird of the river-level, but goes up to 3000 ft. The mountain races are forms of the Javan *A. mystacalis* Temminck.

Dicæum sulaense zita, subsp. nov.

Doubt has been cast on the validity of *D. s. monticolum* Sharpe (Ibis, 1887, p. 425 and plate) from Kinabalu. From an examination of twenty-four Bornean skins, as well as typical *sulaense*, we find that *monticolum* is a good race for North Borneo, and we propose a further race for Central Borneo. The bird has no lowland ally, and has not been recorded from the mountains of West Sarawak.

Description.—A distinct race, differing from *D. s. monticolum* in the following respects:—

Male: flanks grey-green, centre of abdomen and under tail-coverts pale yellow; in *monticolum* the flanks are dull green with a yellow wash and the under tail-coverts almost egg-yellow. In addition, males of the new race are less dark

and more glossy blue above, with a smaller, less bright patch of scarlet on the throat. The bill in *monticolum* is thick and markedly curved towards the tip, whereas in *zita* it is thinner and almost or wholly straight, averaging 1–3 mm. more in length from the gape.

Female : darker and duller on the underside, with greenish throat and chest; *monticolum* females have white or grey-white throats (*vide* Ibis, 1890, p. 287, pl. viii. J. G. Keulemans del.).

On colour this race closely resembles topotypes of *sualense*, but the latter is distinguished by the smaller and brighter scarlet patch on the throat, the larger whitish chin, the dull mauve wash of the upper parts, and the almost sooty crown.

Measurements.—Wing : Dulit, eight males, 47–53 mm.; four females, 45–48 mm. Kinabalu *monticolum* : eight males, 48–54 mm.; three females, 42–47 mm. Bill (males only) : Dulit, eight males, 13–14 mm. Kinabalu *monticolum* : eight males, 11–13 mm., only one over 12 mm.

Distribution.—Mt. Dulit, Sarawak; in the higher zones, mainly in the moss-forest, but also down to 2600 ft. in the Koyan Valley.

Type.—In the British Museum. Male, Mt. Dulit, Sarawak, 4500 ft., moss-forest, September 15, 1932. Testes fully developed, in breeding condition; bill black; mandible slightly paler at the base; feet black; iris dark. Wing 47 mm. Coll. T. H. Harrisson and C. H. Hartley, O. U. Sarawak Expedition, 1932. Brit. Mus. Reg. no. 1933.11.2.8.

Remarks.—Named after Zita Baker, who has helped us greatly, and is also a tropical explorer.

Thus both Kinabalu and Dulit possess a particularly distinct race. The only specimen known from any other mountain in Borneo is one in the Kuching Museum, a male from Mt. Murud, Sarawak, coll. Dr. E. Mjöberg. Unfortunately we have not been able to compare this bird with a series of either race; it has a wing of 51 mm. Four *Dicæum* in the Kuching Museum labelled *D. monticolum* are certainly not *monticolum*, and are probably *D. cruentatum*.

Mr. G. M. MATHEWS sent the following description of a new subspecies of the Soft-plumaged Petrel.

Pterodroma mollis madeira, subsp. nov.

Description.—Differs from *P. mollis feæ* in its generally smaller size.

Measurements.—Wing 245–250; tail 108–110; bill 25–26; tarsus 29–30; middle toe and claw 39–40 mm., as against wing 248–262; tail 106–109; bill 26–27; tarsus 32–36 mm. in *feæ*.

Distribution.—Madeira.

Type.—In the British Museum. Male, San Antonio, Madeira, June 13, 1906. Brit. Mus. Reg. no. 1906.7.26.1.

Remarks.—*Æstrelata feæ* of Salvadori was published in Ann. Mus. Civ. Gen. ser. ii. vol. xx. p. 305. The sheet marked 20 is dated Dec. 1899, and the date on the back of the wrapper is 1901; so the original reference and description should correctly read *Æstrelata feæ* Salvadori, Ibis, April 1900, p. 302. Type-locality: Cape Verde Islands.

NOTICES.

The next Meeting of the Club (the last of the Session) will be held on Wednesday, June 13, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then

appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

Agenda.

1. Mr. C. H. Hartley will read a paper, illustrated by lantern-slides, on "Seabirds of West Spitsbergen—their food supply."

2. Major R. E. Cheesman will read a paper on "The Birds of Abyssinia."

BULLETIN

OF THE

BRITISH ORNITHOLOGISTS' CLUB.

No. CCCLXXIX.

The three-hundred-and-seventy-fourth Meeting of the Club was held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, June 13, 1934.

Chairman : Mr. D. A. Bannerman.

Members present :—Miss P. Barclay-Smith ; F. J. F. Barrington ; Miss R. Blezard ; Mrs. E. S. Charles ; Hon. G. L. Charteris ; Major R. E. Cheesman ; Miss J. M. Ferrier ; H. A. Gilbert ; W. E. Glegg ; Capt. C. H. B. Grant ; Col. A. E. Hamerton ; P. A. D. Hollom ; Dr. E. Hopkinson ; Rev. F. C. R. Jourdain ; N. B. Kinnear ; Miss E. P. Leach ; Dr. G. Carmichael Low (*Editor*) ; Dr. N. S. Lucas ; T. H. McKittrick ; C. W. Mackworth-Praed (*Hon. Sec. & Treas.*) ; Dr. P. H. Manson-Bahr ; G. M. Mathews (*Vice-Chairman*) ; J. G. Mavrogordato ; T. H. Newman ; E. M. Nicholson ; H. Leyborne Popham ; B. B. Rivière ; D. Seth-Smith ; Major M. H. Simonds ; B. W. Tucker ; Miss E. L. Turner ; H. F. Witherby ; C. G. M. de Worms.

Guest of the Club :—C. H. Hartley.

Guests :—C. G. Bird ; Miss Joan E. Charles ; Mrs. Gilbert ; R. P. Graham-Vivian ; A. C. Howard ; H. D. Knight ; Mrs. Mackworth-Praed ; L. Studinka ; W. Thesiger.

Mr. C. H. Hartley read a paper, illustrated by lantern-slides, on "Sea-birds of West Spitsbergen—their food supply."

The base camp of the Oxford University Arctic Expedition, 1933, was established in Petunia Bay, at the head of Klaas Billen Bay in Ice Fjord, and all the biological work of the expedition was carried out in this area—the main object being an ecological survey of the marine and bird life of the Inner Fjord zone, correlated with hydrographic observations. The following account gives a brief summary of the ornithological results obtained by myself and my colleague, Mr. J. M. Fisher: a full report will appear shortly.

The mountains in the Petunia Bay district rise steeply from the shore, and the coastal plain, apart from a few large valleys and corries caused by the retreat of glaciers, is extremely limited. In general the region is somewhat barren, and was found to support a meagre ground-nesting bird population. Ptarmigan, though not much in evidence earlier in the summer, were apparently nesting on the higher ground, and appeared in numbers in September, nearly a hundred being present in Ebba Valley. Northern Eider were also fairly plentiful, sixteen broods being noted along four miles of coast in August. A sprinkling of Snow Buntings and Purple Sandpipers, four small colonies of Arctic Terns, some forty Brent and twenty Pink-footed Geese, and three pairs of Arctic Skuas completed the ground-nesting population of the head region of Klaas Billen Bay.

Weathering has reduced many of the mountains to immense scree slopes with only small rock-faces near the summit, and in consequence the cliff-nesting species in general prefer the less weathered cliffs further down the bay. An exception is found in the Fulmar, which is easily the most plentiful nesting species in the district, establishing itself on every available cliff, both on the coast and up to a considerable distance inland. The main bird-cliffs in Klaas Billen Bay were at least ten miles from the base camp, and accommodated a fair population of the usual species—Little Auk, Puffin, Brunnich's and Mandt's Guillemots, Fulmars in large numbers, and Glaucous Gulls; Kittiwakes, however, were not nesting.

The above summary gives a rough idea of the breeding population. At first sight the district appeared distinctly unpromising even for a study of food-supply, but owing to unforeseen conditions it proved in the end very productive. The biological camp was established in some disused mining huts near the Nordenskiold Glacier, the only glacier in the bay which actually reaches the sea. An unusual flocking of Kittiwakes and Fulmars was immediately observed close to the glacier face at the central point of the sea frontage, where the ice cliffs reached a height of a hundred feet, and constant flights of Kittiwakes were noted passing over the camp on their way to and from this point; it was therefore decided to direct our attention first to an investigation of the causes of this localized feeding area.

The flock consisted normally of about three thousand Kittiwakes and from five hundred to a thousand Fulmars, these numbers being maintained throughout the latter half of July and all August. Stomach analyses were carried out on a quantitative basis, and revealed that the food was almost entirely composed of a small planktonic crustacean of the family Euphausidæ, *Thysanoessa inermis*, the average single meal for a Kittiwake being three hundred and fifty. An estimate of the numbers of Kittiwakes leaving the glacier per day was obtained by half-hour counts four times a day over a period of a week, and from these figures we were able to provide an estimate of the daily rate of consumption of *Thysanoessa* in the feeding area, which was of assistance to the marine biologist of the party in his investigation of the cause of the swarm of *Thysanoessa*. Observations made at the feeding area showed that the *Thysanoessa* were very close to the surface, since the Kittiwake were resting on the surface, making periodic darts in which the head was seldom immersed deeper than the base of the bill. The rate of feeding was observed over the whole period from July to early September, and proved to be relatively rapid, varying from one to six captures per minute, with an average of three.

The Kittiwakes visiting the feeding area were trailed down the coast as far as possible, and then followed with a telescope. They were found to be coming from some large bird cliffs

on the south coast of Ice Fjord, which we had previously noted on our way to Klaas Billen Bay. Tow-nettings carried out in Klaas Billen Bay, taken in conjunction with the results of the Swedish Expedition of 1907, indicate that *Thysanoessa* does not normally occur in the immediate surface layer, and the abnormal swarming at the face of the Nordenskiold glacier is thus of great importance to the surface-feeding bird population of Ice Fjord, which is borne out by the fact that Kittiwakes were travelling up to thirty miles to the feeding area. Montague noted, in 1923, that the Kittiwakes on the north coast of West Spitsbergen were feeding chiefly on fish, but from stomach analyses and the results of dynamiting and night-lines it appears that fish are scarce in Klaas Billen Bay. *Thysanoessa* offers the only possible alternative.

Although Kittiwakes were studied most intensively, detailed stomach analyses were carried out on all other marine-feeding species in the district, from which it was clear that *Thysanoessa* was in general the staple article of diet, though in no case was feeding so exclusive in character as in the case of the Kittiwakes. Fulmars, being pure surface-feeders, were largely dependent on it, since, although they were almost omnivorous as regards floating matter, it offered the only certain food-supply. In the latter part of September, when the swarming ceased, a limited number of Fulmars were still able to maintain themselves on floating refuse, jellyfish, and less plentiful forms of the major plankton. Arctic Terns fed largely in the area surrounding the Kittiwake flock, but, owing to their greater skill in fishing, were also able to capture more active crustacea in the shore zone. Glaucous and Ivory Gulls (the latter stray visitors), which under normal circumstances are both scavengers, were occasionally seen feeding with the Kittiwakes.

Among the diving birds it was noted that no species normally ventured very far in the direction of the glacier, Brunnich's Guillemot and the Little Auk, however, confirmed *Thysanoessa*-eaters, being enabled by their diving powers to hunt for it in waters where it does not occur in the surface layer. The Puffin fed extensively on it, but also made

a speciality of fish-catching, and was often seen in September, after the two previous species had left. Mandt's Guillemot proves to have a more localized hunting ground, being usually found feeding in the *Laminaria* zone near the shore, diving deep into the weed and obtaining a general diet of molluscs, worms, and crustacea. Some adults and a large proportion of the young of the year were, however, to be found feeding further from the shore on *Thysanoessa*. Of the whole marine bird population the Northern Eider alone appeared to be independent of *Thysanoessa*, feeding close inshore on bottom-living crustacea and larger molluscs.

From this short summary it can be seen that the food problem in Klaas Billen Bay is highly simplified from the biologist's point of view, almost all species of marine feeding bird being largely dependent on the same crustacean. The results obtained serve to illustrate the general organization of life in the Arctic. The abnormal swarming of *Thysanoessa*, and the consequent flocking of surface-feeders, is of special interest, since it must account for the ability of the Kittiwake, and, to a less extent, the Fulmar, to support life in the Inner Fjord zone.

Major R. E. Cheesman exhibited some slides illustrating the types of country in North-West Abyssinia, in which his Consular district is situated, and mentioned a few representative birds that inhabit the different altitudes, varying between 2500 feet on the Sudan frontier to 10,000 feet on the Simien Mountains, the highest peak of which is 14,900 feet.

He also showed some views of Lake Tana (6000 feet) and of the bird life encountered on his journey round the lake by tankwa (native reed raft) in 1933.

He concluded by alluding to certain species which, formerly palæarctic migrants, had at some previous period settled down in Africa. Some individuals of the same species had continued to do the return journey to Europe and Asia, whereas others had decided to stay. These residents had now developed racial differences from the migrants, which could be distinguished in the hand, but in the field were very

hard to separate either by their appearance, call-note, or habits.

The migrant breeds in Asia and Europe, the resident in Abyssinia, but both mingle together in Africa during the winter.

He particularly mentioned the Wryneck (*Jynx torquilla*), Hoopoe (*Upupa epops*), Golden Oriole (*Oriolus oriolus*), Common Snipe (*Capella capella*), and Scops Owl (*Otus scops*), all of which migrate annually to Africa, four of which he had watched in their breeding quarters in Europe and Asia in previous years, and all of which have their counterparts in a resident race breeding in Abyssinia. He had now had the opportunity of watching these as well. All five, among others, were seen at their nests, and comparisons were made, and the conclusion was reached that unless the bird was shot it would have been difficult to separate them with certainty from the migrants, excepting the fact that they were breeding in Africa. Their call-notes seemed identical. He also found that most migrants' bodies in spring were encased in rich fat, which, he assumed, was a provision against the long journey northward, as on the bodies of residents the fat was not remarkable.

The Rev. F. C. R. Jourdain said (with reference to Dr. P. R. Lowe's remarks on hybrids between Black Game and Pheasant (*antea*, pp. 138–140)) that he described the bird, which was formerly in his own possession, and was figured in the 'Zoologist' for 1906, as a female because it was stated to be one by the shooter, but that now he was inclined to think it more probable that it was really a male. Dr. Lowe states that his inclination is to regard the hybrids of this type as the produce of a Cock Pheasant and a Grey Hen, on the ground that the Pheasant characters are dominant. This seems to me a better reason for believing that the male parent was a Black Cock and the female a Hen Pheasant. He quotes Millais' remark (written in 1892) that in most of the crosses in which the Black Cock is concerned the young usually take very strongly after him.

This may or may not be correct, but it must be remembered that these words were written over forty years ago, and that even fourteen years later Millais believed that only five specimens of this hybrid existed; so that it is doubtful whether he had seen more than two or three of them. Under these circumstances the statement cannot carry much weight.

I may add that when similar hybrids were exhibited at the B. O. C. Mr. Millais, Lord Rothschild, and Mr. Pycraft all agreed that they were probably crosses between the Black Cock and Hen Pheasant.

The reciprocal cross, in which the Black Cock characters are dominant, is much rarer, but has been recorded at least three times. In this cross the tail approaches that of the Black Cock. As two of these cases are from the counties of Dorset and Suffolk, it is hardly probable that they were Red × Black Grouse hybrids.

Mr. J. G. Mavrogordato made some remarks upon a Cuckoo depositing an egg in a Chaffinch's nest. This was noted alone in an apparently completed but otherwise empty Chaffinch's nest on May 12, 1934. The rightful owner of the nest did not desert it, but went on and laid a full clutch of five eggs. The first of these was laid on May 14, and on May 18 she (the hen Chaffinch) commenced sitting on her own and the Cuckoo's egg.

In due course all of these hatched out, and after this the young Chaffinch's were ejected from the nest in the usual manner by the young Cuckoo. The latter is now being fed on caterpillars, and is in a flourishing condition.

Mr. Mavrogordato also exhibited a peculiar egg, one of a clutch of four in a Hedge-Sparrow's nest, discovered on May 19, 1934. The other three eggs were normal in appearance and half incubated. The strange egg was much bigger, several shades paler, and rattled on being shaken. As it was evident that it would not hatch, it was removed with one of the normal ones for comparison. Both these were shown. The abnormal egg was about the size of a Cuckoo's egg.

Captain C. H. B. Grant and Mr. C. W. Mackworth-Praed sent the following note upon the eastern African races of *Francolinus sephœna* (Smith) :—

It appears to us that there is considerable confusion, that too many names have been accepted, and that existing names have been used without taking into consideration the essential points in the original descriptions.

F. s. jubaensis is described as " below more yellowish than washed with grey, and not having the distinct darker edges to feathers of *F. s. grantii*." Wing, ♂ 136–146 ; ♀ 132–143 mm.

F. s. schoanus is described as " somewhat smaller than *pileatus* (=*sephœna*), but has nothing to do with *F. kirkii*." No measurements given.

F. s. spilogaster is described as being " gastræo fulvo-ochraceo, obsolete fusco vario," which we read as : below yellowish buff, varied with indistinct dusky. Wing 170 mm.

We are surprised to find that this refers to a " plain-bellied " form, but no reference is made to chocolate stripes, and birds in the British Museum from near Harar are " plain-bellied." The name must, therefore, refer to the lighter central striping seen on the underside of some specimens of *F. s. grantii*.

It therefore seems clear that all these are referable to the forms without chestnut stripes on the breast and belly, and that there is only one name available for the striped-bellied bird, i. e., *F. rovuma* G. R. Gray.

We have made a very careful examination of all the material in the British Museum collection, and, in view of a certain amount of individual variation in both size and coloration which must be allowed for, we can only recognize one " plain-bellied " race and two " striped-bellied " races, although we would draw attention to the two small males from Lamu, wing 134 and 136 mm., and one male from Taka, near Lamu, wing 130 mm. These are small birds, but at Malindi, a few miles farther south, and also on the coast, there is a male with a wing of 145 mm. We therefore do not consider them to be a distinct race, and they are certainly not *F. s.*

jubaensis, which has a wing in males, according to Zedlitz, from 136–146 mm. The races we are able to recognize are :—

Francolinus sephæna grantii Hartlaub.

Francolinus grantii Hartlaub, Proc. Zool. Soc. for 1865, p. 665, pl. 39, fig. 1, 1866 : Unyamwezi country (=Northern Tabora Province), Tanganyika Territory, of which *Francolinus sephœna jubaensis* Zedlitz, Ornith. Monatsber. xxi. 1913, p. 59 : Afgoi, southern Italian Somaliland ; *Francolinus schoanus* Heuglin, Orn. Nord-Ost. Afr. iii. 1873, p. 891 : Shoa, Abyssinia ; and *Francolinus spilogaster* Salvadori, Ann. Mus. Civ. Gen. xxvi. 1888, p. 541 : Harar, Abyssinia, are synonyms.

Below, breast and belly *without* chestnut stripes. Wing : males 130–162, females 133–150 mm.

Distribution.—Tanganyika Territory excepting the coastal area, Uganda, Kenya Colony, the Sudan, Abyssinia, and British and Italian Somaliland, reaching the coastal areas from Duruma, Seyidie Province, Kenya Colony, to the Juba River.

Note.—In this race we find that wing-measurements vary individually, and males from southern and central Tanganyika Territory, Uganda, Kenya Colony, Abyssinia (Shoa and Harar), the Sudan, and Somaliland have almost identical measurements, and the individual variation is shown by males having 139 mm. at Omo River, 149 east of Harar, 146 at Shoa, 145 on the Rovuma, and 151 in Central Tanganyika Territory. Males from Lamu, Omo River, Orr Valley, and Kerio River have wings from 136 to 139, and males from Central Tanganyika Territory and Lake Zwai have wings 151 mm.

Francolinus sephæna rovuma Gray.

Francolinus rovuma G. R. Gray, List Spec. Birds Brit. Mus. pt. v. Gallinæ, 1867 (March 6), p. 52. Specimen " *a* " in Gray's list is the type, a female with striped underparts, and *not* specimen " *b*," which is a specimen of *F. s. grantii* having plain underparts (see also Ibis, 1915, p. 12, and 1922, p. 111).

Below, breast and belly *with* chestnut stripes. Wing : males 137–153, females 133–141 mm.

Distribution.—Beira (Masambeti, 6½ miles inland) and mouth of Lurio River, Portuguese East Africa, to Chiromo and Ruo River, South Nyasaland, and Rovuma River, Mikindani, Lindi, Morogoro, Dar-es-Salaam, and Korogwe in Tanganyika Territory.

This race would therefore appear to be confined to the more coastal areas lying between the seaboard and the Shiré River, the eastern Rovuma, Morogoro, about 100 miles inland, and Korogwe, about 40 miles inland, but being replaced in the coastal areas of Kenya Colony and southern Italian Somaliland by a " plain-bellied " form, which is *F. s. grantii.*

But in British Somaliland a " striped-bellied " form occurs from the coast to the Wagar and Goolis Ranges, where it appears to intergrade with the " plain-bellied " race. This Somaliland " striped-bellied " race is cut off from *F. s. rovuma* as shown above, and as all existing names refer to " plain-bellied " races, it would appear therefore that there is, unfortunately, no name available for this Somaliland " striped-bellied " bird, and we therefore propose for it the name

Francolinus sephæna somaliensis, subsp. nov.

Description.—A " striped-bellied " form having chestnut-brown stripes on the breast, flanks, and abdomen. Similar to *F. s. rovuma* Gray, but perhaps rather larger.

Measurements.—Wing : males 157–164, females 147–150 mm.

Measurement of Type.—Wing 158, tail 96, culmen 23, tarsus 47 mm.

Distribution.—British Somaliland from seaboard to Wagar and Goolis Ranges, west to Jifa Medir (Jerato Pass, Suksade Plain, Bihendula, Sheikh, Kabab, Jifa Medir).

Type.—In the British Museum, ♂ adult. Bihendula, about 20 miles south of Berbera, British Somaliland, collected by Dr. Donaldson Smith for H.H. The Gaikwar of Baroda, December 28, 1898. Brit. Mus. Reg. no. 1901.4.20.46.

Remarks.—Although the " plain-bellied " and " striped-bellied " forms are generally constant, we find occasional specimens of the one bearing characters of the other, for

there is a male from the northern Tana River (Brit. Mus. Reg. no. 1906.12.16.9) and a female from Kitwi, Kenya Colony (Brit. Mus. Reg. no. 1900.9.4.5), both of which have a few spots on the chest. There can be no doubt that where *F. s. grantii* runs into the country of *F. s. rovuma* and *F. s. somaliensis* interbreeding occurs. Friedmann, Bull. 153, U.S. Nat. Mus. 1930, pp. 106–112, has come to very similar conclusions about the races, but has kept up *F. s. schoanus* Heuglin, and does not remark on the " striped-bellied " coastal form of Somaliland.

Captain C. H. B. Grant and Mr. C. W. Mackworth-Praed also sent the following descriptions of two new races of Francolin :—

Francolinus coqui thikæ, subsp. nov.

Description.—Has the clear abdomen of *F. c. hubbardi* Ogilvie-Grant, but the black barring of breast and flanks much narrower ; upper parts nearer to type of *F. c. maharao* Sclater, but perhaps less chestnut; flight-feathers chestnut with grey markings and tips. This new race has the abdominal characters of *F. c. hubbardi* and the chestnut flight-feathers of *F. c. maharao*. It appears to be a good local form, and replaces *F. c. hubbardi* east of the Rift Valley.

Soft parts : Iris light brown, bill dark yellow, legs yellow.

Measurements.—Wing 138, culmen 18, tail 62, tarsus 35 mm.

Distribution.—Fort Hall District of Kenya Colony.

Type.—♂ adult. Ithanga Hills, Fort Hall District, Kenya Colony, collected by C. W. Mackworth-Praed on 27. ix. 1914. Brit. Mus. Reg. no. 1923.8.7.147.

Francolinus castaneicollis kaffanus, subsp. nov.

Description.—Differs from the typical race by having the mantle and rump plain olive-brown, with very faint indications of some white edges and centres on some feathers. Crown of head bright chestnut. Below rather more buff, with olive-brown, not chestnut, spots at apical end of breast-feathers. It differs distinctly in the markings of the mantle and breast-feathers to *F. c. gofanus* Neumann. The mantle and rump

partake of the character of *F. c. ogoensis* Mackworth-Praed, but are distinctly darker.

Soft parts : Bill and feet bright coral.

Measurements.—Wing 225, tail 107, culmen 29, tarsus 65 mm.

Distribution.—The Kulo and Kaffa areas of Western Abyssinia, west of the Omo River Valley.

Type.—In the British Museum, ♂ adult, De Sium's Town (circa lat. 7° 15′ N. long., 36° E.), Kaffa District, Western Abyssinia. Collected by Louis Clarke on July 2. Presented by Col. Stephenson Clarke. Brit. Mus. Reg. no. 1923.8.7.489.

Remarks.—Four specimens examined.

Mr. Jack Vincent forwarded the following descriptions of two new subspecies, resulting from the work of identifying Mr. A. W. Vincent's collection of birds, made in the Katanga Province of the Belgian Congo, an area in which there has been surprisingly little ornithological investigation during recent years; also the description of a new Warbler recently received at the British Museum in a collection of birds from southern Nyasaland :—

Uræginthus bengalus katangæ, subsp. nov.

In Ibis, 1926, pp. 369–376, Admiral Lynes revised the genus *Uræginthus*, and suspected that a new race of *U. bengalus* was to be found in the south-eastern Congo, but he hesitated to name it, as only four birds were available, a male and female from the Lofu River, and a male from Kassongo in the British Museum; also a bird from Baraka which was in Tring. In the ' Systema,' also, it will be found that one undetermined race is mentioned. Four more examples, however, have now arrived from the Elisabethville district of the Congo, and these prove that the dark coloration, surmised by Admiral Lynes to be the determining factor as well as mentioned by Sharpe (Cat. Birds Brit. Mus. xiii. 1890, p. 401), is constant. I propose to name this race *katangæ*, as the Katanga Province of the Belgian Congo, another point presumed by Admiral Lynes, is obviously the centre of its distribution.

Description.—In both sexes forehead, crown, hind head, nape, mantle, and back showing none of the warm brown tones so evident in other races, such as have been described as cinnamon-brown in *U. b. bengalus* (Linnæus, Syst. Nat. ed. xii. 1766, p. 323 : Senegal) and in *U. b. schoanus* (Neumann, J. f. Ornith. liii. 1905, p. 350 : Ejere, Shoa), or as vandyke-brown in *U. b. ugandæ* (Zedlitz, J. f. Ornith. lix. 1911, p. 606 : Entebbe, Uganda); instead, these parts are of a plain sepia. In a long series this race proves very easy to distinguish, for the dark birds are in great contrast, and can be separated at a glance.

As regards the males, the turquoise-blue is in the aggregate much deeper in this race, but not an infallible character, as there are individuals from other races in which the colour is as intense. The darker colour of the back is, to a slight extent, reflected in the darker or arterial blood-red of the ear-patches.

The principal distinction as regards the underside is in the females, for whereas in other races the cobalt-blue is on the chin, lores, throat, ear-coverts, and upper breast, and extends down sides of breast to the flanks, in this new race the blue is invariably much more intense and turquoise a colour, and very restricted. It is similarly on the chin, lores, throat, and ear-coverts, but extends little, if at all, on to the chest, and there is no indication of blue whatsoever on the avellaneous-fawn remainder of the underside.

Colours of bare parts (from the collector's notes).—Irides chestnut. Bill lilac, but with tip, commissure, culmen-ridge and keel of lower mandible black. Feet brownish-flesh in the cock, flesh in the hen.

Distribution.—So far as is at present known the south-eastern Congo Basin, including its eastern rim, and the Congo–Zambezi water-parting.

Type.—Collector's no. 231, an adult male, pair with co-type, and parent of a nest of four eggs, collected by Mr. A. W. Vincent at Elisabethville, Belgian Congo, on March 17, 1933.

Measurements of type.—Wing 55; tail 53; culmen from base of skull 11; tarsus 14·5 mm.

Co-type.—An adult female, pair with, and collected at same time and place as, the type, by Mr. A. W. Vincent, collector's no. 232.

Measurements of Co-type.—Wing 54; tail 51; culmen from base of skull 11; tarsus 14 mm.

Buccanodon anchietæ katangæ, subsp. nov.

Another example of a racial difference, apparent from two southern Congo specimens in the British Museum Collection, and now proved constant by examples in my brother's recent collection. I propose to name this also *katangæ* for the same reasons as those put forward in the case of the previously-mentioned Cordon-bleu.

Description.—As unlike nominate *B. a. anchietæ* (Bocage, Proc. Zool. Soc. 1869, p. 436 : Caconda) as is *B. a. sowerbyi* (Sharpe, Bull. B. O. C. vii. 1898, p. xxxvi : Fort Chiquaqua, Mashonaland), for the latter has neither the yellow coloration on the throat nor the black collar on the hind-neck and chest of the former, and this new race has the yellow coloration but still lacks the black collar; in short, the adult male and female differ from *B. a. anchietæ* and *B. a. rex* (Neumann, Bull. B. O. C. xxi. 1908, p. 47 : Duque de Bŕaganza) in having a great deal more yellow on the underside.

In the nominate form the sides of neck, lower throat, and chest are glossy black streaked sparingly with pale citron-yellow, the streaks quite absent on the last-named; in *katangæ* the pale citron-yellow is so diffused that darker coloration is only faintly evident here and there, where the dark sepia bases of the feathers are visible. Furthermore, whereas in *anchietæ* the yellow is separated from the brown breast by the broad black band of the chest, in this new race the yellow is so extended and continued over the chest as to eliminate the black and to meet the brown.

Colours of bare parts.—Irides dark sepia. Bill and feet black.

Distribution.—The south-eastern Congo Basin.

Type.—An adult male, collected on the Kaluli River (Baluba country), Katanga Province, Belgian Congo, at an elevation of 3000 feet, by Dr. S. A. Neave, on April 20, 1907. Brit. Mus. Reg. no. 1909.12.31.78.

Measurements of Type.—Wing 92·5; tail 47; culmen from base of skull 20; tarsus 19·5 mm.

Apalis macphersoni, sp. nov.

In my list of mountain birds (Ibis, 1934, p. 159) I have mentioned a yellow-breasted Apalis as " seen " on Cholo Mt., and in my manuscript for the continuation of the same paper, under *Apalis flavigularis*, I wrote that I shot at and wounded a pair of the unknown birds high up in the forest canopy, but was unsuccessful in securing an example. It is of unusual interest, therefore, that my contention as to the existence of a new Apalis on Cholo Mt. has been borne out by the recent arrival of two birds at the British Museum, in a collection made and generously sent by Mr. D. W. Macpherson of Nyasaland. I propose to call this new species *Apalis macphersoni*, as a compliment to one who has turned my failure into success.

The bird is in every way extraordinarily like *Apalis melanocephala*, the only species which closely approaches it as regards length of tail; and in my own brief experience the two species are very much alike in the field, both in their movements and choice of habitat.

Description.—Its colour-pattern is an unusual one, but it may be remarked that in general it is not unlike *Apalis jacksoni* (Sharpe, Ibis, 1891, p. 119 : Mt. Elgon). A detailed description is as follows :—*The male bird* : forehead, crown, hind-head, nape, mantle, back, rump, upper tail-coverts (*i. e.*, entire upperside), and ear-coverts black with greenish-blue gloss. Lores black. Chin and throat white. A band of black across lower throat which extends up towards middle of the throat, and is, therefore, wider at its centre. Chest saffron-yellow and forming a broad pectoral band which margins the black throatal band. Breast, abdomen, and flanks gamboge-yellow. Feathers of thighs blackish-grey, tipped with white. Lower tail-coverts white. Central rectrices black tipped with white, the white tips increasing in size and extending gradually down the outer webs of succeeding feathers until, on the outermost rectrices, the entire outer web, as well as the broad tip, is found to be white.

Scapulars and wing-coverts glossy black as the back. Secondaries black with broad margin of white on the outer webs, and narrow edges of the same colour on the inner webs. Primaries black margined with white on the inner webs only, broadly at the base, but quite absent at the extreme tips. Under wing-coverts white faintly washed with yellow at the tips. *The female bird* : forehead, crown, hind-head, lores, ear-coverts, and nape slate-grey, faintly tinged on the first-named with pale wood-brown. Mantle, back, rump, and upper tail-coverts olive-green. Rectrices slate-grey, increasingly tipped and margined on the outer webs with white as described in the male. Underparts exactly as in the male, except that the black throatal band is evident only in a dull and dark slate-grey patch in the centre and at the base of the throat. Scapulars, lesser and median wing-coverts olive-green as the back. Greater wing-coverts light slate-grey. Secondaries and primaries blackish-grey rather than black, but otherwise with margins as in the male. Under wing-coverts white.

Colours of bare parts (taken from the collector's labels).—Iris reddish-brown in male, claret in the female. Bill black. Feet salmon-pink.

Type.—Coll. no. 61, an adult ♂ in non-breeding condition collected by Mr. D. W. Macpherson on Cholo Mt., Nyasaland, at an elevation of 3500 feet, on July 21, 1933. Brit. Mus. Reg. no. 1934.3.4.1.

Measurements of Type.—Wing 54 ; tail 94 ; culmen from base of skull 13 ; tarsus 19 mm.

Co-type.—Coll. no. 62, an adult ♀ in non-breeding condition collected by Mr. D. W. Macpherson on Cholo Mt., Nyasaland, on August 30, 1933. Brit. Mus. Reg. no. 1934.3.4.2.

Measurements of Co-type.—Wing 48·5 ; tail 60; culmen from base of skull 12·5 ; tarsus 19 mm.

Mr. Gregory M. Mathews sent the following communication upon the Soft-plumaged Petrel, *Pterodroma mollis*, and its subspecies :—

Examination of the type of *Œstrelata feæ*, Ibis, April 1900, p. 302, from the Cape Verde Islands, kindly sent over from

Geneva, proves it to be a larger bird than the form from the Deserta Islands. This latter is, again, a larger and a more heavily built bird than the breeding bird on Madeira.

Pterodroma mollis mollis breeds on Tristan da Cunha in the Atlantic Ocean.

Pterodroma mollis deceptornis breeds on St. Paul's and New Amsterdam, in the Indian Ocean. These do not have the entire underparts white.

When we come to the northern hemisphere we find the representative races, three forms, all have the entire undersurface white.

Pterodroma mollis feæ breeds on the Cape Verde Islands, and is the largest of the subspecies. Wing 272–280; tail 110–115; culmen 27–30; tarsus 33–36; middle toe and claw 40–45 mm.

Pterodroma mollis deserta breeds on the Deserta Islands. Wing 260–267 (264); tail 110–117 (114); culmen 27–29 (28·2); tarsus 32–33 (32·6) mm. This connects *feæ* with *madeira*.

Pterodroma mollis madeira breeds on Madeira and is the smallest, and is more delicate in build than the above. Wing 245–250 (247·5); tail 108–110 (109); culmen 25–26 (25·5); tarsus 29–30 (29·5) mm.

There is no overlapping of the wing-measurements in these birds, which breed north of the Line.

Mr. Noël Mayaud sent the following description of a new subspecies of the Bluethroat :—

Luscinia svecica namnetum, subsp. nov.*

Description and Measurements.—Differs from *Luscinia svecica cyanecula* in its smaller size, especially shorter wing and tail :

	Wing.	Tail.
29 ♂♂ (breeding)	67–72 mm.	45·8–54 mm.
6 ♀♀ ,, ...	64·5–68 mm.	44·7–51·4 mm.

* [The generic name of *Cyanosylvia* Brehm is also used for the Bluethroats, and is that given in the British Ornithologists' Union 'List of British Birds,' 1923.—Ed.]

Most of these specimens were taken in April and May; some are in worn plumage. Nevertheless the differences in size as compared with *cyanecula* are too great to be due to abrasion; besides, we compared this material with true *cyanecula* taken in Germany from April, June, and July, which are also worn, and these measured :—

	Wing.	Tail.
5 ♂♂	73–76 mm.	52·5–56 mm.
3 ♀♀	75–76 mm.	51–55·9 mm.

L. s. cyanecula is also longer " wing-tipped "* than *namnetum*. From tip of longest secondaries to tip of longest primary 10–18 mm. in ♂♂ *cyanecula**; 9·5–12 mm. in ♂♂ *namnetum*; 9–10 mm. in ♀♀ *namnetum*.

The white spot of the throat of the male is very conspicuous, and was found present in all (except one) of the males (nearly fifty) examined or seen in the field. The lores also appeared darker than in *cyanecula*.

Distribution.—West France, Loire-Inférieure, Vendée, Charente-Inférieure.

Type.—♂, Noirmoutier, Vendée, May 28, 1934, coll. Mayaud, no. 1811.

The VIIIth International Ornithological Congress will take place at Oxford from July 2 to July 7, 1934. The President is Dr. E. Stresemann and the Secretary the Rev. F. C. R. Jourdain. A number of names have already been sent in, and a large attendance is expected. There will be meetings of the International Ornithological Committee, and these and the ordinary sectional meetings of the Congress will be held in Rhodes House. Excursions have been arranged to Lilford Hall (Lord Lilford's Aviaries), to Foxwarren Park (Mr. Ezra's Aviaries), to the Zoological Society's park at Whipsnade, and to the islands off the coast of Pembrokeshire. There will also be receptions, and there will be a dinner at Christ Church Hall on Thursday, July 5.

* A Pract. Hand. of Brit. Birds, i. 1920, p. 478.

Corrigenda to Volume LIV.

P. 13, lines, 11, 15, 16, 17, *for* 1·352 mg., 1·650 mg., 1·828 mg., 1·451 mg., *read* 1·352 gm., 1·650 gm., 1·828 gm., 1·451 gm.

P. 15, line 8, *for* Average, 4 eggs . . . 28·4 mm. × 27·7 *read* Average, 4 eggs . . . 38·4 mm. × 27·7.

P. 97, line 2, *for* Brit. Mus. Reg. no. 1921.7.5.399 *read* Brit. Mus. Reg. no. 1921.7.15.399.

P. 160, line 10, for [*Dicæum*] *sualense* read [*Dicæum*] *sulaense*.

NOTICES.

The next Meeting of the Club will be held on Wednesday, October 10, 1934, at the Rembrandt Hotel, Thurloe Place, S.W. 7. The Dinner at 7 p.m.

Members intending to dine must inform the Hon. Secretary, Mr. C. W. Mackworth-Praed, 51 Onslow Gardens, London, S.W. 7, on the post-card sent out with the 'Bulletin.'

ANNUAL GENERAL MEETING.

This will also be held at the Rembrandt Hotel, Thurloe Place, S.W. 7, on Wednesday, October 10, 1934, at 5.45 p.m. An Agenda and Balance Sheet will be issued in September.

Members who wish to make any communication at the next Meeting of the Club must give notice to the Editor, Dr. G. Carmichael Low, 86 Brook Street, Grosvenor Square, W. 1, as soon as possible. The titles of their contributions will then appear on the Agenda published before each Meeting. All MSS. for publication in the 'Bulletin' must be given to the Editor before or at the Meeting.

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[Names of new species and subspecies are indicated by clarendon type under the generic entry only; vernacular, or common, names are shown in ordinary type.]

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